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ARTICLE I.

Inflammation as seen by the Light of Cellular Pathology.

[A Paper read before the Indiana State Med. Society, Nov. 18, 1862.]

BY JAMES F. HIBBERD, M.D., RICHMOND, IND.

If we regard the cell as the unit of life, or the simplest organization in which vitality exhibits itself, the next step in rational progress is to inquire whether the more complicated forms wherein life is manifested are anything more than, or different from, cells. In the vegetable kingdom it has long been conceded that cells in their multiplied shapes, single or in indefinite numbers, constitute all the structures having life, from the microscopic protophytes of our fresh water ponds, which exist, as it were, but for an hour, up to the gigantic cypresses of the mountains which have braved the storm-king's blasts for thousands of years. But in the animal kingdom the scientific world are only beginning to understand how it is that there, too, cells are the forms of matter having life, and that everything constituting the animal body, other than cells, is but an intercellular substance, placed there by cell action for a definite purpose, and every part whereof is kept under the government of the cell that gave it birth, as long as the healthy organization is maintained.

We are indebted, mainly, to Virchow for demonstrating the foregoing facts, and also for the equally important proposition that cells are always produced by cells directly, and never originate in a blastema, as was taught by Schwann and his followers. The biological importance of this latter fact, and more particularly its value in pathology, can not be overestimated. Already its brighter light has enabled us to detect many errors in our views of diseased action, and in a few years it will have completely revolutionized all our ideas in that branch of biology, and, as a happy sequence, will have also enlarged, enlightened and improved our knowledge of the therapeutical management of abnormal function and structure, as well as have aided us in devising better methods of prophylaxis.

These propositions may be restated with more perspicacity, viz.: there is no manifestation of life, whether normal or abnormal, except by and through a cell; and there is no such thing as a spontaneous production of cells in or out of a blastema, any more than there is a spontaneous production of living bodies out of the elements composing their substance, but all cells are born of parent cells, just as all living bodies are the progeny of previously living bodies.

The cell is, therefore, very properly denominated the "unit" of vitality, and as all the higher organizations are but aggregations of cells, man, the most complicated living structure, is with equal propriety called a "sum of vital unities," though he is only entitled to the dignified appellation in common with every living thing, whether animal or vegetable, which in its physical structure rises above the simplicity of a single cell.

Such being the material of which it is composed, let us examine the construction of a human body and see how its functions are put in operation.

Cells vary in size from, probably, the $\frac{1}{120}$ to the $\frac{1}{6000}$ of an inch in diameter, and are of divers shapes, including spherical, many-sided, flat, cylindrical, fusiform, and branched or stellate cells. The tissues of the body usually delineated by anatomists are quite numerous, but for our present purpose we will take the classification of Virchow, who makes but three, viz.: 1st, cellular tissue proper—*i. e.*, where there is nothing but cell lying in apposition to cell, as in epidermis; 2d, tissue where the cells are separated by an intercellular substance, which, while it separates them, still holds them together, as in cartilage; and, 3rd, tissue where the cells have attained a higher state of development, as in muscles and nerves. These may be called respectively, epithelial tissue, connective tissue, and animal tissue.

Cells breed or multiply in two ways only, namely, either by the formation of several new cells within the parent cell, or by cleavage, forming two or more cells by division of the parent cell, and each of these again becoming the parent to further offspring. The vitellus of the egg, from which all animals spring, is a cell, and its development commences by cleavage within the vitelline membrane. This cleavage continues until the vitellus is a countless mass of cells, when begins the differentiation into tissues; these tissues are very simple at first, consisting of the external and internal blasto-dermic membrane, but as the cells multiply and development continues, other structures spring into existence, becoming more and more complicated, until we have all the organs and apparatuses of the body perfect, the whole coming, as we see, from a single cell.

Now, how is it that the several tissues, organs and apparatuses of the human organism always appear in their proper place and order, and continue their development until the structure is complete, and no longer? How does it happen that the heart is constantly located in the thorax, and the liver in the abdomen? Why is not the nose sometimes placed on the back of the head, a hand occasionally attached to the leg instead of a foot, and the position of the misplaced hand occupied by suspending the ear at the end of the arm? Why do not the intellectual faculties, once in a while, appear almost perfect at birth, and the digestive apparatus be many years in maturing?

We can answer these questions only by declaring that all these things shape their course in obedience to a law impressed upon vitalized matter by its Allwise Creator, just as, by a law from the same source, the eggs of a woman always hatch into human beings, the eggs of a cow into kine, and the eggs of a bird into birds of its own feather. It is not now, and probably never will be, a human privilege to know why this law was impressed upon matter, or how such impression was made; but it is our privilege and our duty to learn the terms and conditions upon which this law becomes active, and the circumstances under which its guiding influence may be impaired, perverted or suspended.

The universality of this law, and its rare violation, are such that it excites but little attention; whereas, if its failures were often complete, or its perversions frequent, the consequent distortions would be so great and abundant that the contrast would be a constant reminder of its existence. It is very desirable that we should have a clear conception of the ceaseless action of this law, for it guides and controls all physiological development, and its modification is at the base of all pathological structures.

Here, then, is presented a man made up, the epithelial tissue constituting all the free surfaces, exterior and interior, and forming the secreting part of glands; the animal tissues, sometimes in large masses, sometimes in smaller quantities, making part of every organ; and the connective tissues everywhere binding all parts into a symmetrical whole, and forming the connecting link between parts where more important material is not necessary, as, for example, tendon between muscle and the point upon which it is intended to act.

Having a man made up structurally, let us continue our labor until we discover how all his functions are brought into successful operations. Every individual cell of the untold numbers that jointly compose the various tissues, owes an appropriate active service which it discharges, and the sum of these activities constitute the phenomenon of man's life. Cells are endowed, not with activity itself, but with a capability of action, called their irritability, and this becomes operative under the influence of appropriate stimulants, and ceases when that influence is withdrawn. In the impregnated egg of oviparous animals the sufficient stimulant to inaugurate cell-action is warmth, which must be constantly applied, and maintained within comparatively small limits until the animal has such an organization as will enable it to take food through its buccal orifice, digest and assimulate the same in its internal organs, and develop its own animal heat. If this warmth is reduced below the minimum during incubation, the irritability of the cells, whatever their state of development, ceases, and no reäpplication of that, or any other, stimulant can reïnstate it. After the epoch of independent life is reached, different organs require different stimulants to incite them to service, and the amount of activity, within certain bounds, is proportioned to the amount of stimulation. *

At least three kinds of activity must be recognized, if we take a view of the whole human body; namely, a functional activity, as when a muscle contracts—a nutritive activity, as when a part simply maintains its structural integrity—and a developmental activity, as when a part increases the number or size of its cells. So intimate is the relation among these activities, that frequently they are inseparable, and doubtlessly sometimes are correlative; but, as already intimated, we can readily select typical examples where their independent nature is clearly discerned.

As already stated, the stimulant requisite for the several organs and tissues differs, and in so complicated an organization as the human body, where the resultant of the activity of one organ is often the stimulant that excites action in another, the whole subject is intricate

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* It is not intended by the foregoing remarks to imply that any new force is created by the application of a stimulant to animalized matter, for there is probably just ground for the belief that all force relating to matter was a coeval creation, and has no more been increased or diminished since, than has matter itself; all the various conditions under which we take cognizance of force being but different manifestations of the original creation, just as the various forms under which we recognize matter are but the different arrangements and combinations of the elements originally created.

and too profound for elucidation here, even to the limited extent to which our data would enable us to go. What we need to remember, however, is, that every cell is endowed with irritability by the Creator as an essential condition of its vitality, and that upon proper stimulation it becomes active as an independent entity. There are animals which consist of merely one or a few cells, as many of the protozoa which float in water, and here the contact of the water containing their food is the adequate stimulant to excite the three activities; and the essential condition of life is not changed in the higher organizations, only the method of the application of the stimulant and the complication of associated action make it more difficult of observation.

It is in these higher organizations that the intricate machinery of the nervous apparatus is present to modify, in so prominent a manner, most of the vital activities. But we will have done a good work toward eliminating much of the obscurity that the nervous system throws around vital activities in man, by remembering that nerves are not essential to vital action at all, and that their whole service is to enable a stimulant, whether physical, chemical or psychical, applied to one part, to excite action in some other part through their agency. Thus savory food in contact with the lining membrane of the mouth induces a flow of fluid from the salivary glands, and a prick upon the great toe will, either with or without the intervention of a mental act, cause the instant contraction of muscles of the leg. To know that nerves are not essential to vital action, witness the whole vegetable kingdom and many of the lower orders of animal existence, all devoid of nervous tissue, and yet replete with luxuriant and beautiful life.

It is thus that normal function is excited and maintained in normal structures.

Beside the healthy stimulant that calls forth healthy or physiological action, an unnatural stimulant may be applied to a part and cause an unnatural activity, which produces unnatural or pathological results. And this may pertain to either or both of the two activities of function and growth already mentioned.

To prick a muscular fibre with a needle will make it contract; and the gentle, interrupted stimulant of the friction of the helve of an axe on the hands of a wood-chopper will presently increase the palmar cuticle to several times its usual thickness, but the same stimulant rapidly applied to hands unaccustomed to it, will speedily produce a blister. The nerves, too, are as efficient agents in pathological processes as in physiological, so that unnatural stimulants applied to one part may produce disease in a remote part, as when wet cold comes in contact with feet accustomed to only dry warmth, we have following it a catarrhal inflammation of the mucous membrane of the fauces.

Pathological stimulants in their nature, source and mode of application, are as profound, intricate and difficult of observation as physiological stimulants. They are sometimes from external sources and sometimes of internal origin, and quite frequently the resultant of diseased action in one part is the excitor of diseased action in another part; and in all these instances the pathological stimulant passes through the same channel, and is carried by the same agencies provided for and used by physiological stimulants.

Pathological action once in operation does not continue of its own force, but is maintained only by the persistent application of a stimulant that compels the part, as it were, to violate the physiological law, and as soon as the unnatural stimulant is withdrawn, the physiological action is resumed as before, or as nearly so as the altered structure will permit. This condition may be illustrated by the condition of a river. While the stream is supplied from the ordinary sources the water flows in a constant manner in its channel, but when the rains come the water increases, overflowing the banks and inundating the adjacent land, making a deposit here and scooping out a cavity there, but when the rains cease the water resumes its pristine channel, without, perchance, it has in its flood career made for itself a partial or complete new course.

If a pathological stimulant be so powerful or long continued as to cause action beyond physiological restraint or recuperation, the part affected loses its vitality and is no longer under any form of biological law, but is controlled by the ordinary affinities of inanimate matter. The initial point, then, of all abnormal functions or structure is the influence of an unnatural stimulant upon the cells of the tissue or organ affected. The particular nature of the departure from healthy action that may ensue depends upon circumstances that it is not within the purview of this article to inquire into except as in the sequel.

One of the forms of pathological action constantly met with is inflammation. No organ, and scarcely a tissue, but may be the seat of this kind of disease. We will take first the skin.

What is the histology of the skin? Beginning at the surface, we find the epidermis, consisting of several layers of flat scales of epithelial tissue, and as we proceed inwards the scales are less and less flat, presently some of them exhibit nuclei and then coloring matter constituting the rete mucosum, and now we reach the connective tissue, interspersed with blood-vessels, nerves and lymphatics. There is no sudden transition from one of these conditions to another, but a regular gradation from the dry flattened scales of the cuticle to the rich juicy cells of the corium; indeed, they are all one formation in different stages of development and of unequal ages. Apply a cantharides plaster to this surface, and it proves a pathological stimulant. If it act promptly, the epidermis is but slightly altered, but the cells of the rete mucosum responding to the stimulant, cause the pouring out of a fluid in such quantities as to separate the epidermis from it, and we find a blister. If the stimulant is no longer active, the fluid is gradually absorbed, new epidermis is produced and the old exfoliated. If, however, the stimulant is still continued, the cells take on their next stage of action, their nuclei multiply, the cells themselves proliferate, but instead of changing into epidermic scales they are developed into pus and flow away. Should the stimulant now become inactive, the formation of pus ceases, the cells soon renew their normal action, the epidermis is reformed, and the spot eventually resumes its healthy appearance. But if the stimulant is not withdrawn at this stage, the cells, one after another, become involved in the diseased action, divide into many cells, which degenerate into pus or other debris and are discharged, causing a disintegration of tissue known as ulceration. Such is a simple inflammation of the skin.

In mucous membranes the inflammatory action is somewhat different. Indeed, there is some variety among the mucous membranes themselves, dependent upon variety in their structure and function. Upon the application of the unnatural stimulant, the cells cause the discharge upon the surface of a serous fluid, (often quite marked in the pituitary membrane,) which is eliminated from the system. Then the cells giving birth to mucus have their service accelerated, and if the stimulant continue active, the same cells are converted into pus and discharged (in bronchitis frequently in large quantities,) and ultimately ulceration may ensue by a destruction of cells faster than they are produced, (not uncommon in the fauces and mouth.)

Pneumonia is the inflammation of the air vesicles of the lungs. We must remember that these vesicles are not lined with mucous membrane as are the bronchial tubes, and consequently the inflammatory action in the two situations is unlike. In pneumonia the air vesicles begin to fill up by the increase of the cells forming their walls, probably both in size and number, and very soon the part of the lung nvolved becomes solidified, not with exudation, but increase of cells and attendant stasis of the circulation. Blood oozes through the altered vascular walls and mingles with the increased secretion from the adjacent mucous membrane of the bronchia, which membrane supplies nearly the whole of the sputa of pneumonia, both in its progressing and declining stages. The solidifying matter in the air vesicles is not expectorated even when the lung clears up, but is absorbed again into the circulation, reversing the order by which it accumulated. Peaslee informs us that large supplies of chloride of sodium are required in the growth of cells, and it is probable that the rapidity of their development in pneumonia may account for the remarkable disappearance of this salt from the urine during the activity of the disease.

Serous membranes under inflammatory stimulation exude serum, often in considerable quantities, as a first act. Then cell growth is initiated, and pus is occasionally made as heretofore described, but more frequently the cell growth continues, until from opposing surfaces such an exuberation of them takes place that they come into contact and make a vital union, which may continue as a permanent organization, constituting the adhesions and connecting bands so frequently encountered in the pleuræ and elsewhere in making post-mortem examinations, even of subjects whose thorax or other part where such adhesions exist, were not involved in the fatal disease. In organs containing much animal tissue, the application of an inflammatory stimulant will involve the associated connective tissue in the changes already mentioned, resulting in the early formation of pus, and ultimately the animal tissue becomes softened and disappears, mostly by fatty degeneration.

If these premises are true, it is quite clear that we can not study inflammation in any tissue or organ with any prospect of intelligible results until we first command, accurately, the histological structure of that tissue or organ. But the structure and physiological service being known, the application of the general laws of inflammation will enable us to understand much that has heretofore been mysterious in these morbid changes.

Our knowledge of inflammation is far more satisfactory now than it was a little while back, but there has not been a sudden jump from where we stood fifteen years ago to our present position, for in all the intervening time, step by step, pathologists have been advancing from the dark and obscure ground then occupied, into clearer and clearer fields, until the present, when comes cellular pathology with its flood of light to illuminate a good many of the cloudy spots not before penetrated by our vision. Still we do not see it all, for the term inflammation covers a very extensive ground, and is made, in the popular professional mind, to embrace all those changes which are accompanied by redness, swelling, heat, pain, and disorder of function, and a great many alterations which are accompanied by only a part of them. If we continue the use of the word, we must school ourselves to remember that it is not always the symbol of the same pathological condition. Diphtheria is called inflammation of the throat, but is quite different from the ordinary catarrhal inflammation of the fauces. Croup is said to be inflammation of the larynx, but it differs pointedly from common laryngitis. Variola and erysipelas are denominated inflammations of the skin, but they are very unlike the pustules of tartar emetic or the erythema of a sinapism upon the cutaneous surface.

Many of these modifications are dependent upon the character of the stimulant exciting them, some are caused by the then histological formation of the organ or tissue in which they are seated, and still others are owing to the combined effect of the two preceding influences.

It will be observed that the difference between the views herein presented and those promulgated by Paget, Bennett and other leading pathologists, consists in this, that it is here supposed that the primary inflammatory action begins in the cells stimulated, and all subsequent phenomena are regarded as a sequence emanating from, and controlled by, the cells; whereas they teach that a point being inflammatorily stimulated, the blood vessels which supply it pour out the liquor sanguinis, as the first act, which is ultimately either absorbed or affords a blastema that is organized into tissue or degenerates into pus.

No theory of disease of any kind can be the true one that does not harmonize all the actions that take place in consequence of that disease, and make understandable all the phenomena observed as a part of its existence. Now let us see if we find a rational explanation of the prominent characteristics of inflammation, in the theory which has just been given.

Five of these prominent characteristics, so long observed and commented upon, are swelling, redness, pain, heat, and derangement of function. The swelling is caused by both the increase of the cells, and the exudation of the intercellular fluid; the redness, by the larger quantity of blood called to the point to supply the pabulum for the rapid formation of cells, and the greater amount of fluid exudations; the pain arises from the altered action of the part, generally, undoubtedly, as the consequence of the abnormal cell action impressing the mere fibre, sometimes, possibly, the effect of the unnatural stimulant upon the nerve directly ; the augmented heat is due to the more rapid vital changes taking place in the part ; and finally, if the premises laid down be true, derangement of function must be a necessary concomitant.

Other phenomena, also, attend upon inflammation, and must be accounted for.

Limited inflammation may take place in, perhaps, any part of the body without creating an appreciable disturbance of the general circulation, but all considerable inflammations accelerate the pulse and bring about that condition of the organism known as fever. There can scarcely be a doubt that in many cases of simple inflammation the impression on the general system is made through the instrumentality of the nerves, by forces originating at the point of disease, and it is equally probable that in some so called inflammations, the altered juices of the diseased tissues are taken into the circulation, and contaminating the blood, stimulate, through its agency, the whole body to febrile reaction.

Prof. Dalton declares the general proposition that whenever the heart's pulsations are increased in frequency, either in health or disease, the force of its contractions are proportionally decreased.* This is undoubtedly true, so far as experiments have been related ; and if it shall prove true in all cases, it will demonstrate a wonderful state of error in the medical mind for these many years, as well as be additional testimony to the inutility of some of the important means long used to subdue inflammation, which were based upon the idea of the decided increase of both the frequency and force of the heart's pulsations.

Fibrine has occupied a very conspicuous position in the history of inflammation and in the consideration of its treatment. A few words will suffice to give its real significance as may be gathered from various sources of recent date. In the physiological state, fibrine is produced by the metamorphosis of certain tissues, is taken up by the lymphatics and carried into the circulation, and is from thence rapidly destroyed in the kidneys and liver ; but how it is destroyed, or what the product of its destruction, does not yet appear. The amount made and destroyed daily in a man of average weight is, probably, something more than three pounds, and the quantity ordinarily in the blood at one time is a little short of one pound. The whole of the fibrine in the blood must, therefore, be destroyed and renewed rather more than three times during every twenty-four hours.

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* Lectures on the Physiology of the Circulation. Amer. Med. Monthly, vols. xiii., xiv. 1860.

Now it is found that whenever a tissue or organ is inflamed that is largely endowed with lymphatics (as, for instance, the respiratory apparatus), there is a large increase of fibrine in the blood, dependent upon the increase of cell action in the part; and on the other hand, where an organ is inflamed that is scantily supplied with lymphatics (as the brain), there is no disturbance of the normal percentage of the fibrine in the circulating fluid. When fibrine has once been taken into the blood, it is not again thrown out as fibrine, except by the rupture or otherwise opening of a vessel, and consequently, whenever it is found outside the vessels in a part inflamed, it must be looked upon as the production of the diseased locality.

There is no disposition to overlook or ignore the very curious phenomena, observed by the aid of the microscope, in the web of the frog's foot or other transparent membrane in which the circulation is maintained upon the application of a chemical or mechanical stimulant, but the period of time covered by these examinations is so brief, the extent of structure within the field of the instrument so limited, and the recorded observations themselves such a mixture of fact and fancy, that, for the present, we can only regard the reported phenomena as curiosities, accessible through the excellence of our optical instruments, to be laid aside until further inquiry shall enable us to assort the real from the imaginary, and point out the relative and positive value of whatever shall be found true.

ARTICLE II.

Dactylius Aculeatus.

BY SAMUEL WILLEY, M.D., SAINT PAUL, MINNESOTA.

A case has recently been observed by me, in which large numbers of this rare and interesting entozoon were passed with the urine for many successive days, and as I had entertained not a little skepticism, in common with others, I fancy, as to its actual occurrence, I make brief mention of the case.

A. W., farmer, aged 19, of strumous diathesis, but of considerable physical vigor, sought advice September 16th, for distressing and constant pain in the back, accompanied with the passage of worms. No particular history connected with the case other than that he had suffered more or less pain for two months, gradually increasing in severity, and not relieved by lying or sitting, but apparently less when actively engaged. No headache, or pain in the course of the ureters, or in the region of the bladder. He says that on the 2d of September, while laboring in the field, he noticed, after passing water, some curious worms crawling in the sand. Supposing them "to the manor born," he gave little heed to the circumstance, until in the course of events he had occasion to repeat the process, when he found that he had passed, by actual count, eighty-three worms, averaging about three-fourths or seven-eighths of an inch in length, very "gay and festive," easily "prone to anger," and manifesting displeasure of physical interference, such as "tickling with a straw," by "grand and lofty tumbling" "very like a whale." In short, they would *flop over, fish-like*, in the most energetic manner. This I verified myself, having made him pass water at the office to avoid any deception.

This parasite is well described in Dr. Dunglison's Annotations to *Cyclopœdia of Practical Medicine*, page 720, except perhaps that, in about one-fourth of those passed, dark spots, six or eight in number, seemed to be interspersed upon the body. The urine having an intensely acid re-action, I prescribed ten-grain doses of iodide of potassium in compound syrup of sarsaparilla, three times daily. After the second dose was taken, no worms were voided for two days. They then appeared black, shrivelled and without life; gradually decreased in numbers for three or four days, since which time, nearly two months, none have appeared. The lumbar pain has ceased, and the subject, intensely gratified, is himself again.

ARTICLE III.

Pregnancy: Its Influence on the Development and Progress of Pulmonary Tuberculosis.

BY A. P. DUTCHER, M.D., ENON VALLEY, PENNSYLVANIA.

This is a question of commanding interest. From our reading and acquaintance with physicians, we are satisfied that it has never received that attention which its importance demands. Medical writers are quite at variance in their opinions on the subject. The greatest confusion prevails on every point connected with it; and from our studies, we have found it impossible to harmonize the different and conflicting opinions expressed with the facts which preside in the case. This will appear quite evident, if I call your attention for a few moments to some of these opinions as they stand recorded on the pages of our most prominent medical authors. For brevity, we will not take you back farther than the last edition of Morton's *Illustrated Pulmonary Consumption*, published in 1839.

On page 206, he says: "The duration of phthisis is greatly modified by the peculiar functions of the female constitution. During the period of pregnancy the morbid action is suspended in the lungs, while all the resources of the system are devoted to the uterine functions. Lactation produces in degree the same effect; and it is thus that child-bearing women, although decidedly consumptive, enjoy a state of comparative health for many years; but the disease is only latent, and prone to recur with fatal violence when this check is removed."

Dr. Montgomery, in his work, *Signs of Pregnancy*, when speaking of the sanitary influence of pregnancy upon coëxisting disease, says (p. 25): Indeed, I think we have sufficient evidence to justify the belief that pregnancy acts in a good degree as a protection against the reception of disease, and apparently on the common principle, that during the continuance of any one very active operation in the system, it is less to be invaded or acted upon by another; thus it has been observed that during epidemics of different kinds, a much smaller portion of pregnant women have been attacked than others; and when women have been laboring under certain forms of disease, happen to conceive, the morbid affection previously existing is greatly mitigated or suspended for the time, as has been frequently observed in phthisis."

Dr. Edward Warren, in his *Fisk Fund Prize Essay*, on the influence of pregnancy in developing pulmonary tuberculosis, published in the *American Journal of the Medical Sciences*, for July, 1857, contends, with much ingenuity and no little learning, that pregnancy is antagonistic to the development of pulmonary tuberculosis, and that when it occurs during the progress of the disease, it is opposed to the continuation of the tubercular diathesis, and may in this way contribute to the arrest of the local lesion. That such results are due to pregnancy, he thinks is evident from the following considerations:

"1. Pregnancy produces a condition antagonistic in the economy.

"2. Pregnancy is a vital process, a highly physiological act, and hence its existence is incompatible with the progress and perfection of a purely morbid effort.

"3. Pregnancy diverts the forces and fluids from the lungs, and to the uterus.

"4. Pregnancy is regarded by a large majority of medical men as antagonistic to the march of phthisis.

"5. Pregnancy depends upon the existence of certain susceptibilities which are inherent in the female system, and hence it is more universal in its operation than any other imaginable cause.

"6. Pregnancy, coition, etc., are particularly desired by women affected with phthisis, which constitutes a *pointing* of *nature* towards a *remedy* for the evils by which the system has been invaded."

Dr. L. M. Lawson, in his new work, *Phthisis Pulmonalis*, says (p. 306): "My own convictions on this subject have been deduced from personal observations, and, although not in the form of statistics, are, at least to myself, not the least conclusive on that account. It is my conviction, then, that in the tubercular predisposition, or even the *precursory* stage of phthisis, the occurrence of pregnancy, under favorable circumstances, and frequently repeated, so change the vital actions as to delay or entirely arrest the impending local deposit. And what I mean by favorable circumstances is, that the person should be in the enjoyment of a fair degree of general health and strength, the pregnancy progress regularly to its natural termination, and that the subject during the time be placed under proper hygenial conditions in regard to exercise, clothing, diet and habitation." When the disease has become fully established, Dr. Lawson is of the opinion that, if the tubercular deposits be limited, and the patient's strength and digestion good, pregnancy may still retard the progress of the local disease. But if the deposits be extensive, and softening has occurred, gestation will not retard the malady, but, on the contrary, will have a tendency to accelerate it.

Dr. Sweet, in his excellent *Lectures on Diseases of the Chest*, expresses an opinion on this subject quite different from those just given. He says (p. 263): "There is a common impression that pregnancy retards the progress of phthisis. Probably it only renders it latent, and thus an apparent rather than a real advantage is gained. That it produces neither of these results in some cases, I am well convinced; and the practitioner who recommends it to his patient may be disappointed even in a temporary advantage. Even supposing that the progress of tuberculosis is retarded during the existence of pregnancy, what is the final result? As soon as delivery has taken place, the pulmonary disease usually advances with a greater rapidity, and, in addition, a child with a strong tuberculous tendency is born. Certainly there is no great advantage in these results, and you will, I hope, be disposed to adopt the opinion that I have formed: never to advise pregnancy to a tuberculous female. Cases of this kind will occur often enough, and the evil consequences be experienced, without, or in opposition to our advice."

M. Laus, in his great work, *Pathological Researches on Phthisis*, p. 305, occupies nearly the same ground as Dr. Sweet, although his ideas are not as clearly expressed. "We have," he says, "not been able to decide whether pregnancy is capable of retarding the progress of phthisis; it is evident that numerous facts are required, and several years in a lying-in hospital, before we can have any positive information on the subject. We may observe, however, that perhaps there have been some error and confusion among those who have hitherto admitted such an influence. It is indeed possible that many of the symptoms of phthisis may be less prominent during pregnancy, while the progress of the disease is really unaffected. On the other hand, it is not impossible that after labor the progress may be more rapid than at any previous period; and this difference before and after confinement may, to a certain extent, have given rise to the impression."

MM. Dubreuilh and Grisolle have both presented reports to the French Academy of Medicine, in which they ignore the opinion of antagonism between pregnancy and phthisis, and have attempted to establish the idea that the progress of phthisis is hastened by that particular state. These gentlemen are the only individuals, so far as my knowledge extends, who have made any attempts to furnish us with any statistics on this subject. They have produced forty-eight cases for the solution of this question; but they are limited in number, and too imperfectly described to be of any material use.

We might quote the opinions of several other writers, but they would not add anything to our knowledge on this subject, or assist us materially in its solution. It can not, however, be denied that the weight of authority, as it stands recorded on the pages of medical practice, is in favor of the opinion that pregnancy is antagonistic to the development of phthisis. But when we reflect that this opinion is based exclusively upon theoretical deductions, we do not consider it entitled to very much confidence. In so important a question as this we should have something more than theory; nothing but facts and their legitimate deductions can fill the bill of our wants in this case. Fine-spun theories may do to amuse the man of fanciful intellect, but they are frequently of no value when applied to the wants of suffering humanity. Perhaps some will regard it an unjust criticism, when I say that in some of our most popular medical works theories are taught almost to the exclusion of facts. And in very many of our medical schools the same great error prevails; and hundreds of young men come forth from them annually to enter upon the practical duties of the profession in no way qualified. Hence it is a notorious fact, that not one-half of them who graduate ever become successful practitioners. They attempt to reduce their metaphysical vagaries to practice, and the result is almost a uniform *failure.*

In our profession it is a serious truth that the opinions and theories of great writers and teachers are too often taken for positive knowledge. Antiquated dogmas take the place of the grand truths discovered by the research of modern medical science; facts derived from practical experience and observation must give place to some miserable hypothesis that should never have found a lodgment in the human mind. The young physician thus learns to depend upon others; he adopts their opinions without proper investigation, and he frequently finds, to his great mortification, that they are erroneous and of no practical utility.

If a man would become a successful practitioner of medicine, he must not depend too much on the opinion of others; and, indeed, this is true in every department of active life. If a man would have success, he must stand up for himself. Every man has his own sphere, his own duties, and his own powers to discharge them. This place no other man is to take; his labor no other is to perform. This is the natural order, the divine arrangement. If a man would acquire might of intellect, be a power in the world and gain an immortal name, he must to a great extent travel through the fields of science independently and alone, never adopting a theory or an opinion because it is sanctified by a great name. And by this we do not mean to intimate that the aid and teachings of others are to be abjured. No, far from it. Let us go to all the great masters of our noble profession, and to all the wisdom which past ages have treasured; of the works of the present time, let us study all those which stand as the indices and prototypes of modern medical science. Let us apply to all the great fountains of knowledge for ourselves, not to fill a reservoir, but to water the plants which grow in our fields. To the young physician I should say, plant your own crops, and reap your own fields, and you will enjoy the sweet fruition of your own labors.

In investigating every subject that relates to the practice of our profession, we should exercise our own judgment, and conscientiously follow its teachings. Especially is this necessary in the case before us, where there is such a contrariety of opinion. If pregnancy is antagonistic to phthisis, its occurrence in a consumptive patient is a fortunate circumstance; if not, it is unfortunate, and he who recommends it is inflicting a great wrong upon his confiding patient. For my own part, I am convinced that pulmonary tuberculosis is not in any way ameliorated by pregnancy.

If pregnancy has such a powerful influence in correcting the tubercular diathesis, and arresting the local lesion, as some authors maintain, we ought at least sometimes to meet with cases of recovery from the fell disease, but such has never been my good fortune, and I have never yet heard of a well authenticated instance in the observation of others. The most strenuous advocates of this theory have never presented a single case of this kind. Dr. Warren, in that elaborate and extensive essay of his, has not furnished a single instance. Dr. Morton mentions one case where phthisis appeared to be suspended, for a long time, by the frequent occurrence of pregnancy, but the individual ultimately succumbed to the pulmonary disorder. Dr. Warren in his essay has labored very diligently to show that pregnancy is a state of plethora, and that this condition is unfavorable to the development of pulmonary tuberculosis. I do not know that this has ever been seriously controverted. But that this state will be generally produced in phthisical females by the occurrence of pregnancy, has never been demonstrated. Indeed, experience teaches us to believe the contrary. Pregnancy, for its proper accomplishment, always requires an extra expenditure of vital power, and as phthisis is essentially a disease of weakness and debility, this must inevitably tend to its development in those who have a decided proclivity to the malady. And how often is it the case, that we see young women afflicted with this disorder marry, become pregnant, struggle through it, and fall a prey to the disease within a year. From these considerations, and others that might be named, we are compelled to dissent from the commonly received doctrine, that pregnancy is antagonistic to the development and progress of pulmonary tuberculosis.

Proceedings of Societies.

Proceedings of the Cincinnati Academy of Medicine.

Reported by W. T. Brown, M.D., Secretary.

[A large portion of each session for the meetings of November were occupied by Dr. Gans in reading a *resume* of the recent doctrines of Thrombi and Emboli. At the present time we have just had a report of some length by Dr. Tate, on the Progress of Obstetrics, which has suggested some discussion. The sessions are well attended and full of interest—especially in the reports and discussions of cases. We abstract some of these reports for the present number of the *Lancet and Observer*.—W. T. B.]

Hall of Academy of Medicine, Nov. 10, Dec. 1, 1862.

Obstetrical.—*Dr. J. B. Smith*—Related the history of a case of version recently occurring in his practice, not so much because of the unusual character or peculiar interest of the case, but to illustrate the efforts of nature. It was a presentation of the right elbow; he turned and brought down the feet. Nature he believes always makes the quarter turn. A rotary movement occurred just as the hips were passing the vulva, and the child's abdomen turned to the mother's back.

Dr. Taylor—Said he was called yesterday morning to see a woman who had been delivered the Friday night previous, by a midwife. Her labor was perfectly natural, but the midwife gave her ergot to expedite the delivery. At 3 A. M. Sunday morning she was seized with a severe pain over the abdomen; great tenderness; could not bear the weight of her bedclothes; pulse 130, not full; tongue moist; there was some nausea and headache. He prescribed opium in full doses with a little calomel. To-day she is quite comfortable.

Dr. Smith—Spoke at some length in regard to the treatment of such cases now and formerly. He supposed it was a case of pseudoperitonitis, or a neuralgic case. Dr. Smith also reported the following case, now under treatment in the Commercial Hospital. It was one of ulceration of the cervix uteri, with thickening of the anterior lip. There are exuberant granulations, which bleed when touched. She has been taking, for three weeks, protiodide of mercury, and a saturated solution of nitrate of silver has been applied locally three times a week. The enlargement is reduced one-half.

PUERPERAL CONVULSIONS. — *Dr. Thornton*—Regretted he was not present at the meetings of the Academy while the subject of puerperal convulsions was under discussion, but he desired to make a few remarks. He looked upon puerperal convulsions as a phenomenon or symptom depending upon a variety of causes, which must be treated according to the pathological conditions present. He had treated three cases in his practice; two of them were brought on by the irritation produced by labor, and were benefitted by blood-letting. The third case depended on the elements of urea in the blood—in other words, uræmea. A non-elimination of the elements of urea is the cause of the convulsions when labor comes on. Braunn, of Vienna, goes so far as to carry out the practice, that when there is uræmic poisoning premature labor is to be induced. There may be albuminuria, and the elements of the urea be eliminated by the kidneys. Albuminuria is of long continuance and impoverishes the blood. If there is a want of the proper development of the constituents of the blood, there is uræmia. In such cases no one would think of blood-letting.

Dr. F. Schmidt—Said, while in the hospital in Vienna, a woman was brought in with puerperal convulsions. He gave her chloroform whenever the convulsions came on, and narcotized her twenty times between 12 P. M. and 10 o'clock the next morning. He used an instrument to dilate the os uteri, turned and brought down the feet. The child was still living, but died before delivery could be completed with the forceps. The mother recovered. She received no treatment except the chloroform and tartaric acid to decompose the ammonia. She was discharged well on the eighth day. He had seen several cases of convulsions in this country. He had never bled any of them, and they all got well; could not believe the abstraction of blood diminished the inflammatory process, and stated further that, as a general rule, they do not bleed in Vienna in the management of such cases.

Dr. Thornton—Said Civiàle has reported cases of stupor brought on from the absorption of urea into the blood, and the odor of urine has been detected in the blood. There is every reason to believe that there is a condition of the blood brought about by, or depending upon, an absorption of urea, or non-elimination of urinary elements, which is a true poisoned condition.

ANIMAL POISONING.—*Dr. Fries*—Reported the following case: A tanner called at his office, laboring under this disease, contracted from handling putrid animal hides. The pustule where the poison was absorbed was prominent and distinct; the redness extended along the forearm to the elbow; there was enlargement of the axillary glands, high febrile reaction, and complained of great pain. Dr. F. thought there was great similarity between cases of animal poisoning and phlegmonous erysipelas, and that the same treatment was indicated. In this case he directed free applications of nitrate of silver to the inflamed region, and large doses of the mur. tinct. of iron internally. He discharged the patient convalescent on the second day.

Dr. Wood—Thought Dr. Fries was correct in his views. He had recently seen a similar case in the practice of Dr. Walker. The man had been engaged in skinning dead animals. The pustule in this case where the poison had been absorbed presented the characteristics of the vaccine pustule, but was not distinctly gangrenous. The patient is doing well under the same treatment as was adopted by Dr. Fries.

Dr. Wood also reported an additional case of similar disease in his own practice. The man had a large bleb extending two inches above and two inches below the elbow, filled with bloody serum. There was great pain in the arm, and very great constitutional disturbance; pulse full and bounding. All the soft parts under the bleb sloughed out, leaving a large suppurating wound, but he eventually got well. He thought there was no difference between animal poisoning and erysipelas, except that he thought the latter tended more rapidly to run into gangrene.

HEPATIC ABSCESS.—*Dr. Taylor*—Reported the following case: The patient was seized on last Tuesday with a severe pain in the lower part of his abdomen, and was dead in ten minutes. The post-mortem examination revealed a large amount of blood and pus covering the intestines and pressing them to one side. An hepatic abscess in the left lobe of the liver, which had been previously diagnosed, had ruptured, discharging its contents through a very small opening. The parts surrounding the opening were very vascular. He presumed the hæmorrhage was the cause of the sudden death.

ERYSIPELAS.—*Dr. Carroll*—Said he had recently treated an army officer, who had erysipelas of the face and scalp. At first he had fever of an inflammatory kind, with great pain in his head, and swelling of the face. He became blind on the second day. He had been in the habit of drinking. The doctor said he was fearful of the effects of general blood-letting, but applied twelve leeches over the inflamed part, purged him and then prescribed antimony. A few hours after he was leeched, the swelling was much reduced, and the pain in his head relieved. He ordered fomentations to be applied to his face, purged him every day, and continued the antimony. He got well in eight or ten days. Dr. C. said he had determined years ago to use leeches over the inflamed part in erysipelas, and he had found the practice most fortunate. Incisions were recommended some twenty-five years ago by some gentleman in England in an essay on, Erysipelas, for which he obtained a prize. Dr. Carroll had pursued this practice in some cases of erysipelas of the extremities, with good results. After making the incisions, he used fomentations. He had tried almost all of the local applications,—mercurial ointment, fomentations, nitrate of silver, etc.,—and had come to the conclusion that they were of little use; that the constitutional treatment was the most essential.

Dr. J. B. Smith—Wished to corroborate the statements made by Dr. Carroll in regard to local applications. There had been some fifty cases of erysipelas treated in the Washington Park Military Hospital without any local applications whatever, unless it was simply milk and water. The duration of the disease was seven or eight days. He did not leech, purge or give antimony, but he fed his patients well, and gave wine, beef tea, carbonate of ammonia, muriated tincture of iron, etc. He had used no local applications for the last four or five years of his practice. Before that, when he used them, they did not prevent the extension of the disease until the constitutional symptoms improved.

Dr. Baker—Said he was called to attend a soldier a short time ago, who was shot at the battle of Perryville, the ball passing between the radius and ulna, fracturing the ulna slightly. The case progressed favorably until all danger was passed, as he thought, when he was suddenly seized with a chill, followed by fever and erysipelatous inflammation. He prescribed quinine and wine internally, and as a local application a lotion of acetate of lead. He thought gentlemen should make more distinction in the treatment of their cases of erysipelas. In the phlegmonous variety, he had used scarification with advantage. It prevents destruction of the tissues.

DIPHTHERIA.—Dr. Baker also reported the following case: He was called to see an infant six months old, with diphtheria. The tonsils were covered with a false membrane, amounting almost to ulceration; the mouth also was involved. He prescribed the chlorate of potassa, moved the bowels with oil and turpentine, applied counter-irritants around the neck, and internally a weak solution of nitrate of silver. The gums were very much swollen, yet he was afraid to scarify, but afterwards felt satisfied he was in error in this respect. Saturday gangrene commenced over the gums where the teeth were to come through. He arrested its progress, but the gangrenous parts sloughed off to-day, and severe hæmorrhage followed. This he controlled by a strong solution of alum. He gave quinine, and continued it from the first. The child, though feeble, is very much improved. Dr. B. had seen several cases of diphtheria recently, and every member of the family in which the case occurred would have sore throat. He was in the habit of giving cathartics, and when the patient was strong, calomel in combination with jalap. Then he followed with chlorate of potash, stimulating gargles and counter-irritants.

Dr. W. B. Davis—Said that he had treated a great many cases of diphtheria lately, and it was his experience that it was more contagious than at any time since the disease made its appearance, but it was of a milder form. There was seldom severe ulceration, there was some exudation, but not in every case. He used chlorate of potash, and in severe cases, one drachm of chlorate of potash with one drachm of mur. tinct. of iron in a four-ounce mixture, and also an expectorant if there was much cough. He seldom ordered wine, but in its place *lager beer*. And in this connection the Doctor also related the case of a little boy, two years of age, who was very much reduced, really in a typhoid condition, and who *refused* medicine and all kinds of sustaining treatment until he prescribed lager beer, of which he drank one quart in twenty-four hours. From this time he improved and got well.

Correspondence.

CINCINNATI, December, 1862.

EDITORS LANCET AND OBSERVER:—In a previous number of your journal, (*vide Lancet and Observer*, June, 1862,) having directed attention to the pulp of pumpkin seed, in emulsion, administered in *large* and *frequently repeated* doses, as a specific against tænia, the following case is reported in confirmation:

Henry Williams, æt. 25; occupation, butcher; residence, East Walnut Hills. Fragments of the worm were voided, from time to time, through a period of nearly ten years. He had been under treatment repeatedly, during that time, without relief. He suffered the usual symptoms of intestinal irritation, with great loss of flesh.

Mr. W. was ordered eight ounces of the emulsion every third hour, Nov. 25th, 1862. The following morning, the dead worm was purged away, twenty-three feet, six inches, in length; the medicine proving decidedly cathartic, as was experienced in the four cases previously reported.

This remedy, doubtless, destroys the parasite by its direct toxicological effect. That it is not anthelmentic, as a demulcent merely, is sanctioned by a former treatment of the foregoing case; this individual having taken, under the advice of a notorious "Eclectic" of this city, frequent and copious draughts of slippery-elm tea, unremittingly, for several weeks, with the avowed intention of "smothering the animal," or rendering its habitation so *slippery*, that it would inevitably glide away. Very respectfully, G. R. PATTON.

DR. G. A. DAYTON reports, in the *American Medical Times*, two cases of tænia expelled by the use of pumpkin seeds. Dr. D. remarks, in regard to this remedy, that to make it almost a specific, "the seeds should be thoroughly bruised, so that the particles can come in contact with the head of the worm; also that fasting is absolutely necessary to enable the remedy to accomplish its work."

Reviews and Notices.

The Action of Medicines in the System: or "On the Mode in which Therapeutic Agents introduced into the stomach produce their Peculiar Effects on the Animal Economy." By FREDERICK WILLIAM HEADLAND, M.D., etc., etc., etc. Fourth American Edition. Philadelphia: Lindsay & Blakiston. 1863.

The volume before us is a new edition of a book already well known to students of materia medica. It is the prize essay to which the Medical Society of London awarded the Fothergillian gold medal of 1852. We have heretofore expressed the warmest commendation of "Headland on the Action of Medicines," and in a former volume of the *Lancet and Observer* gave at some length an analysis of the work. It will scarcely, therefore, be in place to repeat what we said at that time. We will only with the greatest brevity indicate the plan of the essay. One of the introductory chapters is occupied with a summary of the more important classifications of medicines, and opinions of authors respecting their actions. Chapter III. treats of the "General modes of action of therapeutic agents introduced into the stomach; treated in ten propositions." These ten propositions constitute the body of the book, and are used as the means of expressing the peculiar views of our author. The remainder of the book is taken up with some account of the action of some of the more important medicines in particular. The book is an excellent one, and its careful study will materially add to the medical philosophy of any physician.

For sale by Robert Clarke & Co. Price $2.00.

A Practical Treatise on Dental Medicine: Being a Compendium of Medical Science as connected with the study of Dental Surgery. By THOS. E. BOND, A.M., M.D., Prof. of Special Pathology and Therapeutics in the Baltimore College of Dental Surgery. Third edition, corrected and enlarged. Philadelphia: Lindsay & Blakiston. 1863.

The author of the "Practical Treatise," whose title we have given above, is the well-known Professor of Special Pathology in the Baltimore College of Dental Surgery, and the book before us, although treating of topics common to medicine and dental surgery, is nevertheless more properly a dental work, and intended for students and practitioners of dental surgery.

The particular scope of the book, and purpose of Dr. Bond may be better expressed however, by a few extracts from the original preface, which we quote. He says that—

"The Baltimore College of Dental Surgery was organized with the design of teaching Dentistry as a regular branch of medicine, in which relation only it can be regarded as a scientific pursuit, and the practice of it esteemed a profession.

"With this view it was arranged that the Faculty should consist equally of dentists and practicing physicians, and to the author of this treatise was entrusted the chair of Special Pathology and Therapeutics. Commencing the performance of his duties with no larger amount of knowledge of the subject than is commonly possessed by medical men, he has been led to discover much more importance in it than at first he could have supposed to exist. Endeavoring to avoid the very natural error of exaggerating the value of isolated facts or doubtful statements, upon matters at once novel, and from the circumstances peculiarly interesting, he has found that many things which at first he was disposed to regard as unlikely, are nevertheless well attested and established facts. And after mature investigation, he has become fully convinced that the relations of the teeth and their appendages with other, and even with vital parts, are sufficiently important to be carefully studied both by the dentist and physician.

"After ten years' experience as a teacher of these subjects, he has found it absolutely necessary that a compendium of medicine should be furnished, in which should be brought together, in a small compass, such selected information as should meet the wants of the Dental Surgeon; and as none has been prepared by another, he has reluctantly undertaken the task."

How well our author has performed his self-allotted task is in some degree answered by the fact that we have already this third edition of the book called for and issued.

The introductory chapters are allotted to the consideration of such general principles and general diseases as become applicable to the field of inquiry laid out by Dr. Bond. Thus we have a chapter on general etiology, symptoms and progress of disease, inflammation and its consequences, ulcers, tumors, etc., etc. The other chapters take up for consideration such topics as these: Diseases of the teeth and face dependent upon morbid conditions, either general or of other parts; morbid secretions of the mouth; morbid effects of first dentition; sympathetic diseases of dentition; effects of diseased teeth and gums upon the general health. Then follow some chapters devoted more particularly to diseases and accidents of the mouth and adjacent parts.

So it will at once appear that our author has selected a field of topics that peculiarly occupy the middle ground between medicine and dental surgery, and peculiarly illustrate the view of Dr. Bond that dental surgery is properly a branch of medicine, and can only be properly and wisely practiced with an intelligent knowledge of the entire science. The book, we have already said, is prepared more especially for the use of dental students and practitioners; but we cordially commend its perusal to the general medical reader, as presenting matters of interest and importance to all.

For sale by Robert Clarke & Co. Price $3.00.

Address delivered before the State Medical Society of Indiana, in Indianapolis, Nov. 18th, 1862. By THEOPHILUS PARVIN, M.D., President of the Society.

It has rarely been our pleasure to listen to a more chaste and elegant address than was delivered before the Indiana State Medical Society by its late retiring President, Dr. Parvin; and its perusal as now published and on our table has been a renewal of that quiet enjoyment. It has been a serious question whether we ought not to devote enough space in our journal to its entire reproduction. We can hardly afford room for the address entire, but we make a few extracts which will give our readers an idea of the style of the man and the character of the address.

The State Medical Society of Indiana is in a prosperous condition, and every respectable physician of that State ought to give his personal contribution to its continued growth and stability.

The address opens with the following beautiful and fit tribute to the memory of Drs. Brown, Parry and Dunlap, who had deceased since the previous meeting of the Society.

"'Art is long; life is short.' True, and appropriate to us at this time, these words of the divine old man of Cos. Is not life short? Familiar faces rarely absent from our annual meetings, we behold no more. Three at least of our number, and, how strange the fatality! all three from this city, who were with us when we last convened, have passed away forever from earthly scenes. One of these was in the morning, comparatively, of professional life, esteemed by all who knew him; another past the meridian, not, indeed, of professional life, but of the usual period of earthly existence, yet in his robust stalworth form promising a score of years in active labor,—enviable eminence and success were his,—his a character rock-like in its firmness and integrity, his a heart child-like in its simplicity and earnestness; the third well on to the sunset hour of life, unto whom there belonged somewhat of patriarchal character, the oldest practitioner probably in the State, certainly in this part of it, and who was worthy of patriarchal respect—past his three-score years and ten, unobtrusive almost to reserve, he went his way with that quiet dignity which is inseparable from worth, a judicious physician and an unwavering friend. Clay Brown, Charles Parry, and Livingston Dunlap are with us no more. Often the victors for others in the struggles with disease, they themselves are vanquished, and after life's fitful fever sleep well in that grave which is our common heritage. By the bond of a common suffering, one life and one end thereof—

disease, death, the grave, standing in the pathway of each—how closely, how firmly our hearts should be knit together so that no jealousy, or passion, or personal resentment might ever find place for exercise, or power, even temporarily to estrange members of one guild and one brotherhood."

Dr. Parvin's theme is the proper culture of the physician, especially dwelling upon the advantages of *philosophic and literary culture.* As introductory, however, to the main topic of the discourse, he dwells somewhat upon the rank and character of our profession, and the nobility of medicine. Thus he says :

" We, as physicians, are the representatives of medicine—those with whom we are associated know our science and art by us as exponents. This representative character lays upon us a responsibility which is neither to be evaded, nor lightly esteemed. If we are equal to the responsibility, if we are faithful in the discharge of the duties thus imposed, it is well. But have we brought into the temple where we worship such qualities of head and heart as will constitute a suitable offering ? Are we causing men to honor us, and, in honoring us, the Profession, to which we have consecrated all our energies and abilities ? Is our culture, our growth in such direction as best to advance our chosen science, not merely in public esteem, but likewise in actual merit ? Especially are we teaching, by example, the youth who look forward to be our coadjutors or successors, the intrinsic nobleness of the physician's calling, the discipline of intellect, the thorough and constant culture of all our powers requisite therefor, and manifesting a spiritual life reverent amid sacred mysteries and humble under solemn responsibilities, but yet fervid with enthusiasm—an inspiration to all noble young hearts, kindling them with fervor and enthusiasm ? When Imlac had recounted to the Prince the requisites for a poet, Rasselas replied : ' Enough ! thou hast convinced me that no human being can ever be a poet.' And, possibly, when the qualifications and culture requisite for the practice of medicine are presented, the weak and timid soul may exclaim—' Enough ! thou hast convinced me that no human being can ever be a physician.' But it is better to elevate the medical standard too high, than submit to the frequently popular, and I fear sometimes professional, degradation of it. One of the most valuable of American authors, (Dr. J. G. Holland,) bearing, too, our professional title, in a recent work, utters these words : 'As for the medical profession, I tremble to think how many enter it because they have neither piety enough for preaching, nor brains enough to practice law.' Into the question of relative piety it probably is unwise to enter—it would be ungracious at least—the moral effect might be bad even to claim equality in this regard with our clerical friends ; nor will we venture upon a controversy with the legal profession—it is idle to argue with lawyers upon any subject—as to the respective number of ounces avoirdupois of cerebral matter each possesses in his brain-case, though we can justly assert that individual members of our profession have been proven to have a larger quantity of brains than those of any other calling—we except Cuvier, but surely he is nearer to us than he is to the lawyers—larger than one of the greatest generals, and one of the greatest statesmen of modern times,—the brains of Abercrombie and Dupuytren outweighed by some ounces those of Napoleon and Webster."

Without pretending to follow the thread of the discourse, we give another extract, alike full of truth and beauty :

"The true physician must combine the two great offices of observation and reflection. His senses furnish him with the raw material, which his higher powers must weave into some sort of fabric. Facts are the mere hieroglyphics upon the tablets of nature—he is the interpreting priest unto whom they are Divine revelations. If a physician's experience through three-score years and ten, be crowded with facts, it of itself is nothing—it is nothing; it matters not what he has seen, but the question is, what does he know ? what laws has he deduced from this multitude of facts ? what generalizations has he made, what principles has he grasped ? If none, wherein is he wiser than one of those kind-hearted creatures not wearing bifurcated garments, who has consecrated herself to playing doctor gratuitously and miscellaneously, who can cure croup with lard and molasses, or scarlet fever with tar, drive out the measles with saffron tea, and who always has some infallible remedy for inflammation of the mammary gland, nasty or nice, from earthworms and Kiersted salve up to pancakes ? So far as experience enlarges the boundaries of permanent knowledge, it is of infinite value unto all ; even if it gives its possessor better therapeutical success, we cheerfully admit its value to him and to those benefitted by his practice. But let us remember what Hippocrates has said, 'experience is deceptive ;' or Cullen, 'in medicine false facts are more numerous than false theories.' While it is much easier to observe than to think, and so the great majority are observers rather than thinkers ; yet to observe correctly is no easy matter—the work is often done hastily, imperfectly, not patiently and completely. Now one important corrective of hasty observations, of deceptive experience and false facts, will be found in the thorough discipline of the intellectual powers—the observer will know what he is looking for, what are the essential elements in morbid phenomena, rejecting impertinent, accidental, or apparent facts, retaining those which are pertinent, fixed, and real—in short, reflection will improve observation. And here it may be incidentally remarked, the skepticism which we meet with now and then, in our professional literature, manifested, too, not as a general thing by inferior minds,—a skepticism which we have also witnessed occasionally in our State Society, on the part of some of its members, is to be regarded as an omen of good. Because men doubt, they inquire ; doubt is a portal to knowledge, a gateway to philosophy. Doubts are the sentinels guarding our spiritual life, as pains our physical. No man rests upon a bed of roses when these sentinels disturb him, but up and away with all his soul's energies,—up and away through the dark wilderness of skepticism to the promised land of light beyond. Better be glad, then, than grieve that there are medical skeptics in the regular profession—men who question much of our generally received teaching and practice. Though

> "'There is a consecrating power in time,
> And what is gray with years to man is god-like,'

yet this should not defend hoary errors; human knowledge would progress slowly if Faith were man's only teacher. Let, then, everything we believe and do in medicine, if necessary, be subjected to the most thorough investigation, to crucial experiments; we will know more; whatever is true will abide—gold from the crucible, the diamond in the sunlight—and the sooner the false is swept away the better."

We conclude our extracts with the following paragraph toward the close of the address, suggestive in itself, and at the same time evidently a key to the literary character of the author:

"Let us not forget in our strictly philosophic and professional studies, a wider range of literature; let us have a place in our libraries for some of the classic writers of ancient and of modern times. A certain variety of diet best promotes our physical health, and nature bountifully provides it. We need, too, diverse articles of intellectual food, and the world's best minds have produced them in rich abundance. Suitable reading will enlarge the physician's mind, driving out little and low thoughts, liberalizing and making his soul truly catholic, teaching him charity for the frailties and errors of his fellow men, and admiration for their virtues; making him know man better, whatever of evil or of good, whatever of truth and error there may be in all things he believes, in all things that he does; and the liberal soul in all things human, in all faith and practice, will ever find some portion or semblance of truth, some portion or semblance of good, and in no thing human absolute, unalloyed truth,—absolute, unalloyed good: there is none good save One, there is none true save Him who sways the sceptre of the Universe."

Dentition and its Derangements: By A. Jacobi, M.D.

This little volume is a reprint from the *American Medical Times* of a course of lectures delivered by Prof. Jacobi in the New York Medical College. The lectures were mostly published in the *Medical Times*, and as the author tells us, are now reproduced in book form at the solicitation of many friends. The title sufficiently indicates the topics of the volume. It is quite as much of a contribution to dental literature as to regular medicine. It is readable enough, but not of very great value. It is published by Baillière Brothers, 440 Broadway, N. Y. The price is $1.00, for which the publisher forwards the book by mail.

Editor's Table.

The New Year.—To our readers, one and all, we extend the greetings of the season. A new year is upon us! There never was a time when a higher or more imperative demand was made upon the true physician than at this very hour. It well behooves the devotee of medicine to be in earnest in his calling to-day. During the past year many shining marks have been the victims of death's arrow: some in the quiet walks of private life; some at work on the battle-field of our common country. The year to come will not spare our hard-working, ill-remunerated ranks. Let us be at work when the messenger comes, in the faithful discharge of our duty. We have plenty to do: be not found with laggards. For ourselves, we hope the *Lancet and Observer* will be the evidence, that we make no exhortation we are not anxious ourselves to obey. For another year we hope to be the common carrier of good news, and the continued tidings of scientific progress.

Delay in our Issue.—We have intentionally delayed the issue of the January number of the *Lancet and Observer*. Under the present state of affairs in the country, it is absolutely necessary to keep the affairs of the Journal trimmed up very close; and with the great advance in the price of printing materials, we can only sustain the existence of our publication by most careful management. We have, therefore, been obliged to cull our mail books very carefully, and erase from our list many names that have become delinquent. Many of these are, doubtless, very clever gentlemen; but in such times as these it is a question of life or death with us, and we are more and more closely driven to the absolute cash system. All those considerations have compelled us to start the year with some caution. We are gratified, however, to be able to say that we are receiving an unusually large accession of new subscribers, and from our old friends fresh assurances of their good will—many of these expressing their surprise that, under all the circumstances, we should still retain our rates ($2 per year) unchanged. To all such we say we shall try it for one year, at any rate; and if we lose by the operation, it will be time enough to make an advance and an appeal to their generosity. We, however, do not anticipate any loss, if we can only have prompt payments and a hearty co-operation from all our friends.

Clubbing with other Publications.—In our prospectus, and in editorial paragraphs in the present issue, we offer, for the convenience of our friends, facilities for club subscription with the *London Lancet, Braithwaite*, and several other publications, medical and literary. But we desire to repeat, once for all, that we can not *open any credits* for any of these publications. None are given to us. *We forward the cash for every copy* of these publications ordered for our subscribers. We have already had requests to forward the *Lancet, Braithwaite*, etc.,—the money to be remitted at some indefinite time in the future—by enough of our patrons to exhaust all our market money for the next three months. We should be glad to oblige our friends, but a little reflection will show how unreasonable and impossible is their request.

The Transactions of the Ohio State Medical Society will be ready for distribution to members within a very short time. The delay has arisen from the wish to include all the reports. One, at least, a very valuable one, was incomplete at the session of the society, and time was extended for its completion. We regret to say that, although the Publishing Committee have delayed as long as possible, this report, although promised, has not come to hand. These explanations will be a general reply to many impatient inquiries.

Report of the Surgeon-General of the United States.—The entire medical profession of the country, whether connected with the service or not, will read the report of the Surgeon-General with interest. It is replete with interesting information and suggestions. We, therefore, give it entire.

Notwithstanding the many adverse circumstances which have surrounded the almost entirely freshly organized medical department of our army, notwithstanding the tendency to extravagance and incompetence in our army, we are satisfied that facts will yet demonstrate that the medical department of the army has been conducted with the most economy, fidelity and ability of any department of the service.

Another very noteworthy fact should be observed in this connection. Although a large portion of the Federal army has been recruited from Western and North-Western States, and marched, with unusual privations and exposures, through the most unhealthy districts of the South, yet the summer months have passed without the appearance of any severe epidemic amongst our troops. This is the reply we make to those croakers who supposed the hardy soldiers of the North would never endure a Southern climate. The same statistics are given in the history of the war with Mexico.

It is gratifying to learn from the Surgeon-General that "never before were the sick and wounded of an army so well cared for, as are those who have suffered for their country in the present rebellion," and that "the hospitals are a credit to the nation."

The Surgeon-General, we observe, recommends, incidentally, the establishment of a national army medical school. We have recently taken occasion to express our disapprobation of this scheme, and, notwithstanding our high respect for Gen. Hammond, we do not see occasion to change our views. He makes quite a number of other suggestions, however, that we trust will receive prompt attention and be carried into speedy effect. The report is business-like, clear in its statements and requests, and does credit to the ability of our Surgeon-General.

SURGEON-GENERAL'S OFFICE, November 10, 1862.

SIR:—I have the honor to lay before you a statement of the fiscal transactions, and a report upon the operations generally, of the Medical Department of the Army, for the fiscal year ending on the 30th of June, 1862.

The amount of the appropriation for the Medical and Hospital Department on the 30th of June, was:		
In the hands of disbursing agents		$6,006.62
In the Treasury of the United States		41,172.92
Amount appropriated per Act, July 17, 1861		1,271,841.00
Amount appropriated per Act, February 25, 1862		1,000,000.00
Amount appropriated for deficiency to June 30, 1862, approved February 25, 1862		125,000.00
Amount refunded into the Treasury, on account of Medical and Hospital stores sold at auction, viz: D. D. Morrison, $330.60, Jno. Moore, $950.50, E. H. Abadie, $330.48, I. D. Cotton, $240.00, Samuel Elliott, $18.82		1,874.35
Total		$2,445,894.89
Of this sum there has been expended on account of pay, etc., of private physicians, contracted in 1861,	$85,052.91	
do do. do. do. do. do. 1862,	86,597.76	
For medicines, instruments, hospital stores, etc	2,249,462.52	2,371,113.19
Leaving in the hands of disbursing agents		$74,781.70

It has been usual for a report of the sickness and mortality of the Army to accompany this report, but it is found impracticable, arising from the vast amount of labor incident thereto, and it will be furnished, it is believed, in time for publication as a supplement to the "Surgeon-General's report for the fiscal year, ending June 30, 1862." In the meantime, however, I am able to present the following statement of General Hospitals, and the number of patients according to the latest returns received at this office.

[Here follows a list of all the General Hospitals in the United States, with their capacity for patients.—Ed. L. & O.]

The number of General Hospitals is thus seen to be 150, and the total number of patients in them, 58,715.

During the past year the health of the troops has been remarkably excellent. No epidemics of any severity have appeared among them, and those diseases which affect men in camp have been kept at a low minimum. Scurvy has been almost entirely prevented, and yellow fever, from which much was feared, has had but few victims. This immunity is due to the excellent hygienic arrangements instituted, and to the cordial manner in which Generals in command have coöperated with the proper authorities.

In an army of the size of that now maintained by the United States, it was of course to be expected that the absolute number of sick would be very large, and the important battles which have been fought have thrown a large number of wounded on the care of the Department. At present the total number under the charge of officers of the Medical Department is not short of 70,000, and immediately after the battle of Antietam it was over 90,000. That this large number could be provided for without some cases of unnecessary suffering occurring, would perhaps be too much to expect; but I must commend the Medical Corps, both of the Regular and Volunteer service, for the faithful and efficient manner in which their duties have been performed. In the discharge of their duties Medical Officers have been very much aided by the contributions of the people of the country, and by the efficient coöperation of the Sanitary Commission and Relief Associations.

In addition to providing the sick and wounded with medical attendance and medicines, much has been done by the Department in furnishing food, clothing, and comforts of various kinds. From much observation, both at home and abroad, and from the concurrent testimony of distinguished foreign medical officers, I am satisfied that never before were the sick and wounded of an army so well cared for as are those who have suffered for their country in the present rebellion. The hospitals, I take pride in saying, are a credit to the nation.

Before the several medical boards in session during the year (from July 1st, 1861, to June 30th, 1862), a large number of applicants for appointments in the medical staff of the Army were invited by the Secretary of War. Of these sixty-six candidates duly presented themselves. Thirty-three of this number were approved, and five rejected; the remaining twenty-eight withdrew, one on account of physical disqualification. Before the same Boards eleven Assistant-Surgeons were examined for promotion, nine of whom were found qualified, and two not considered as coming up to the standard of merit required. In the examination by these Boards, the standard of attainments required for success was much lowered, the Board in New York being ordered to examine two candidates each day for the regular army, while the examination of candidates for the appointment of Surgeon of Brigade became little more than a farce. Since the 1st of June last, however, the standard of examination has been raised, and the gentlemen now entering the Medical Staff have been found fully competent to undertake the important trust with which they are charged.

The breaking out of the rebellion found the United States Army with a Medical Department arranged for a peace establishment of 15,000 men. Experience soon demonstrated the fact, that, however efficient its officers might be, the organization was such as to ill adapt it to the necessities of a large force in time of war. Partial progress in the right direction was made by Congress in increasing the rank of the Surgeon-General, adding a limited Inspecting Corps, and increasing the number of Surgeons, Assistant-Surgeons, Medical Cadets, and Hospital Stewards. The Department was also placed on a more independent footing, and its whole status elevated. But there are still other measures, which, if adopted, can not fail to add to the efficiency of the Department, and these I desire to urge through you on the attention of Congress.

First among these is the establishment of a permanent Hospital and Ambulance Corps, composed of men specially enlisted for duty in the Medical Department, and properly officered, who shall be required to perform the duties of nurses in the hospitals, and to attend to the service of the ambulances in the field. By the establishment of this corps several thousand soldiers, now detached as nurses, cooks, etc., would be returned to duty with their regiments, and the expense now incurred by the necessary employment of contract nurses obviated. A corps formed upon the basis of two men to each company in service, organized into companies of 100 privates, with one Captain, two Lieutenants, four Sergeants, and eight Corporals to each Company, would relieve the line of the Army from all details for the Medical Department, and enable the Department to render far more efficient services to the sick and wounded than it is capable of affording under the present system. The necessity of such a corps has been recognized in all European armies, and I am able to speak from personal observations of the great advantages to be derived from it.

I regard an increase of the Medical Corps, both of the regular and volunteer forces, as absolutely necessary. The law of Congress, approved July 2d, 1862, provides sufficiently, except for Cavalry and Artillery regiments, for the wants of troops in the field, but the service in hospitals has to be filled to a great extent by the employment of contract physicians. I therefore recommend that the Medical Corps of the Regular Army be increased by twenty Surgeons and forty Assistant-Surgeons, and the Staff Corps of Volunteer Medical Officers by fifty Surgeons and two hundred and fifty Assistant-Surgeons. This last Corps now consists of 200 Surgeons and 120 Assistant-Surgeons. The Cavalry and Artillery organization requires Medical Officers as much as Infantry. The omission on the part of Congress should be supplied; a Surgeon and two Assistant-Surgeons should be authorized for each regiment of Cavalry, and for each regiment of heavy Artillery, and an Assistant-Surgeon to each Light Battery.

Under the first section of the Act of June 30th, 1834, Assistant-

Surgeons of the regular army must have served five years before being eligible for promotion as Surgeon. On the 1st of November there were but six Assistant-Surgeons in the army who had served five years. The effect of this law will be to prevent the filling of vacancies which may occur in the grade of Surgeon, and I therefore recommend that so much of said section as requires Assistant-Surgeons to serve five years as such, before being eligible to Surgeoncies, be repealed.

The number of Medical Cadets is altogether too small for the necessities of the service. I therefore recommend that authority be given to appoint as many as may be required, in accordance with existing laws on the subject.

The institution of a Medical Inspecting Corps has been productive of excellent results. The number of Inspectors authorized is, however, too limited to enable the service to be as efficiently performed as is desirable. I therefore recommend that two Inspectors General and eight Inspectors be added to the present organization. The authorization of an additional Assistant Surgeon-General would also be a measure of great propriety.

Considerable progress has been made in the establishment of an Army Medical Museum. The advantages to the service and to science from such an institution can not be over-estimated. I respectfully recommend that a small annual appropriation be made for its benefit.

An Army Medical School, in which Medical Cadets and others seeking admission into the Corps, could receive such special instruction as would better fit them for commissions, and which they can not obtain in the ordinary medical schools, is a great desideratum. Such an institution could be established in connection with any General Hospital, with but little if any expense to the United States. A hospital of a more permanent character than any now in this city is, I think, necessary, and will be required for years after the present rebellion has ceased. I therefore recommend that suitable buildings be purchased or erected for that purpose. If this is done, the Medical School and Museum will be important accessions to it.

Experience has shown that a most useful class of officers was authorized by the Act relative to Medical Storekeepers. The number now authorized is too small. They could very properly perform the duties of medical purveyors, now performed by medical officers, and thus officers who have been educated with special reference to service as physicians and surgeons, and who are now acting as medical purveyors, would be enabled to resume their proper duties. I therefore recommend an addition to the medical storekeepers.

At present the washing of clothes in General Hospitals is provided for as follows: One matron is provided for every twenty patients, who receives a compensation of six dollars per month and one ration. Great difficulty is experienced in large General Hospitals in procuring a sufficient number of matrons to perform this duty, and I have the honor to propose that, instead of this now unreliable plan, a sum of money, equivalent to the pay and allowance of a matron, say twelve dollars for every twenty patients, be monthly allowed to every General Hospital, to be appropriated for laundry purposes at the discretion of the Surgeon in charge, whether to the payment of matrons or the payment of bills for washing by steam or otherwise.

The tenth section of the Act approved July 17, 1862, gives additional rank to officers of the Adjutant-Generals, Quartermasters, Subsistence, and Inspector-Generals Department who are serving on the Staff of Commanders of Army Corps. There is, I think, manifest propriety in extending the provisions of this Act to the officers of the medical department who may be on duty with such command as medical directors, and I respectfully ask for such extension.

The Engineer and Ordnance Departments are charged with the erection of buildings which require special knowledge. The building of hospitals also requires knowledge of a peculiar character, which is not ordinarily possessed by officers out of the medical department. It would, therefore, appear obviously proper that the medical department should be charged with the duty of building the hospitals which it is their duty to administer.

In the matter of transportation the interests of the service require that the mecical department should be independent. Much suffering has been caused by the impossibility of furnishing supplies to the wounded, when those supplies were within a few miles of them in great abundance.

The establishment of a laboratory, from which the medical department could draw its supplies of chemical and pharmaceutical preparations, similar to that now so successfully carried on by the medical department of the Navy, would be a measure of great utility and economy. I therefore respectfully recommend that authority be given for this purpose.

In regard to the age at which recruits are received into service a change is imperatively demanded, both for the interest of the Army and the welfare of individuals. The minimum is now fixed at eighteen years, and it is not uncommon to find soldiers of sixteen years old. Youths of these ages are not developed, and are not fit to endure the fatigues and deprivations of military life. They soon break down, become sick, and are thrown upon the hospitals. As a measure of economy, I recommend that the service age of recruits be fixed by law at twenty years.

The present manner of supporting the cartridge-box is productive of hernia or rupture. Many instances in support of this statement have occurred since the commencement of the rebellion, and reports on the subject are frequently received from medical officers. I recommend that, instead of being carried around the waist, the cartridge-box be supported by a shoulder-strap. This would entirely obviate the evil.

At the last session of Congress the sum of two millions of dollars was appropriated for the relief of discharged soldiers. I recommend that one million of dollars of this sum be set aside for the establishment of a permanent home for those who have been disabled in their country's service. This measure is one of such importance that I forbear entering into details at this early period. An establishment of the kind organized upon an *approved plan* would be productive of *incalculable benefit.*

Soon after my appointment, I issued circulars to medical officers, inviting them to coöperate in furnishing materials for a Medical and Surgical History of the Rebellion. A large number of memoirs and reports of great interest to medical science, and military surgery especially, have been collected, and are now being systematically arranged. The greatest interest is felt in this labor by the medical officers of the Army and physicians at large.

The reörganization of the Medical Department necessitated a new set of regulations for its guidance. Under your orders a Board has been in session preparing a new code. Their labors have been very much interfered with by the necessity of detailing them, from time to time, for more imperative duties ; but I expect to be able to submit to you, in a short time, a complete set of regulations for your approval.

I have deemed it my duty, with your sanction, to visit, from time to time, the hospitals and armies of the eastern portion of the country. I have thus been enabled to make myself acquainted with their sanitary condition and medical wants. I hope, ere long, to be able to extend these inspections to the west.

A uniform diet table for General Hospitals has been prepared with great care, and promises to work advantageously.

Large depots of medical supplies have been established at New York, Philadelphia, Baltimore, Fortress Monroe, Washington, Cincinnati, Cairo, St. Louis, and Nashville, which have proved of incalculable advantage to the sick and wounded. Moreover, large sums have been saved by the accumulation of stores before the recent advance took place.

In terminating my report, I desire to express the hope that the labors of the Officers of the Medical Department may be made more and more worthy of the high mission which has been confided to them.

I am, sir, very respectfully, your obedient servant,

William A. Hammond, *Surgeon-General.*

Hon. E. M. Stanton, *Secretary of War.*

Remarkable Longevity and Fruitfulness.— From the *Carthage* (Jefferson County, N. Y.,) *Republican* we clip the following interesting notice of the death of an aged lady of that county :

"Hannah Christina Hulbert (familiarly known in the neighborhood as 'Granny Davis,') died at the residence of John Nobles, in Wilna, Jefferson county, New York, on Saturday, the 29th day of November, 1862. Her precise age is unknown, but there are good reasons for believing she was over one hundred and fifteen years old, and probably her age was near one hundred and twenty.

"For many years she had been so deaf that it was impossible to hold much conversation with her, and her extreme age rendered her infirm, and impaired her memory. There is, therefore, an uncertainty as to her age and early history. But from such statements as she had made, the following particulars are believed to be correct :

"Her maiden name was Hannah Christina Stanley. She was of Dutch parentage, and, as is believed, was born in Wyoming, Pennsylvania. She afterwards removed to Johnstown, in this State, where she lived many years, and where she was several times married. She resided there at the time of the French and Indian War of 1756–63, and used to relate some incidents of the war, particularly that she cast bullets for the soldiers. In the Revolutionary War, she is believed to have been taken prisoner by the Indians, and have been some years in captivity. She had resided in Wilna for about fifty years.

"She had been married to four husbands, all of whom she survived. Her first husband's name was Shove; her second, Dobson; the third, Davis; and the last, Hulbert. She was considerably over eighty years old when she was married the last time. Her last husband was a Revolutionary soldier, and, as his widow, she has drawn a pension from the Government for nearly twenty years.

"She was the mother of at least seventeen children, although some who knew her say she used to claim that she had borne twentry-three, and was ambitious to bear another, that she might fill up the complement of two dozen. Her descendants, of four or five generations, are scattered over the whole country, and may truly be called "legion," for they are many. Her youngest child was Elijah Davis, who died suddenly in Wilna several years since, and who, if living, would now be about fifty-four years old. The deceased stated many times that she was over sixty when Elijah was born. She has resided with Elijah's widow, now Mrs. Nobles, since her last husband's death.

"She was a woman of extraordinary bodily strength and vigor. She used to work in the field, and he was a smart man who could do the amount of work which she accomplished. Many a day did she rake and bind, keeping up with the fastest cradler. With the old-fashioned Dutch implement, called a 'sith,' she was very expert; and even after she had attained her eightieth year, she was competent to do the full day's work of a strong man. Throughout her long life she suffered very little from disease.

"Old as she was, she did not die of old age, of which, indeed, few people die. Her disease was dysentery, and the struggle of her strong constitution with that disease was severe, and it was not easy that death bore away the prey for which he had long waited."

The American Journal of Ophthalmology.—This new and valuable publication continues to progress on its way with an even tenor. To all physicians who are interested in eye surgery it will be an entertaining and important auxiliary. It is published by Dr Homberger, of New York, each number being issued every alternate month, at the moderate price of $2.00 per year. Should any of our subscribers desire to take the *American Journal of Ophthalmology* in connection with the *Lancet and Observer,* we are pleased to say that we have such arrangements with Dr. Homberger that we can offer the two in club for $3.50 per annum (of course, in advance.)

A Physician's Location for Sale.—A physician in the south-western part of Ohio desires to remove west, leaving a very desirable location for sale. It is about thirty miles from Cincinnati, on rail-road, in the midst of a rich country, and good population. The property for sale is new, and is estimated to be worth $1,500, and will be disposed of in fair payments. For further information, reference may be made to the publisher of this journal.

The Atlantic Monthly issues a most capital number to start on the new year of 1863. And, notwithstanding the great advance on the price of printing materials, the publishers continue to afford 144 pages monthly of beautifully printed matter for the old rate of $3.00 per year. Some of the most gifted essayists and attractive writers of the day are regular contributors to the *Atlantic*. Should any of our subscribers wish to take this publication in connection with the *Lancet and Observer*, we make a club rate of $4.50 for the two, (paid in advance.)

Harper's Monthly Magazine.—This national family magazine has failed to reach us since the commencement of a new volume in December last.

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ARMY MEDICAL MATTERS.

Cincinnati Military Hospitals.—In the Marine Hospital Dr. E. Williams has retired from the charge, and Dr. John Davis succeeds. Dr. F. Schmidt is transferred from the Washington Park Hospital to the Marine, and is placed in charge of the ophthalmological department. By order of the medical director, all diseases of the eye in the military hospitals of this (Cincinnati) district are sent to the Marine Hospital, and all venereal patients are sent to Camp Dennison.

The Washington Park Hospital is undergoing further improvements, which will greatly add to the comfort of the inmates. Mr. M. H. McKinstry, recently Steward of Military Hospital at Wheeling, is transferred to Washington Park Hospital, and has entered upon his duties. This hospital, from affording a capacity of more than 200 patients, will hereafter be reduced to a maximum of 150 beds.

We are also very glad to notice the wonderful transformation in the condition of hospital affairs at Camp Dennison. Dr. Carpenter has devoted a great deal of attention and energy to this much-to-be-desired improvement, and has met with a degree of success that is exceedingly gratifying. In these endeavors he has been promptly seconded by Dr. Cloak, the surgeon in charge. The hospital wards have been plastered; abundant additions have been made to the furniture and fixtures; the wards have been systematized; the medical staff almost entirely reörganized; and, in a word, from being the eye-sore of the Director of this department, it has become his pride. There are now in Camp Dennison Hospital about 1100 patients, with capacity for 400 more.

Directory of Hospitals.—The attention of clergymen, editors, and others is respectfully requested to the following notice, which is of interest to all who have friends in the army, and which it is therefore desirable should be widely published:

The Sanitary Commission have established an office of information in regard to patients in the Hospitals of the District of Columbia, and of Frederick City, Maryland. By a reference to books, which are corrected daily, an answer can, under ordinary circumstances, be given by return mail to the following questions:

1st. Is —— —— [giving name and regiment] at present in the hospitals of the District or of Frederick City?

2d. If so, what is his proper address?

3d. What is the name of the Surgeon or Chaplain of the hospital?

4th. If not in hospital at present, has he recently been in hospital?

5th. If so, did he die in hospital, and at what date?

6th. If recently discharged from hospital, was he discharged from service?

7th. If not, what were his orders on leaving?

The Commission is prepared also to furnish more specific information as to the condition of any patient in the District hospitals, within twenty-four hours after a request to do so, from an officer of any of its corresponding societies.

The office of the Directory will be open daily from 8 o'clock A. M. to 8 P. M., and accessible in urgent cases at any hour of the night.

The number of patients in these hospitals is about 25,000. If found to be practicable, the duty here undertaken locally by the Comsion will be extended to include all the general hospitals in the country.

FRED. LAW OLMSTED, *General Secretary.*

ADAMS HOUSE, 244 F STREET, *Washington, D. C., Nov.* 19, 1862.

Mortality Among the Iowa Troops.—A correspondent of the *Chicago Times* says, that of the seventeen regiments furnished by Iowa, but a trifle over half the number now remain to bear arms. Of the eleven regiments with General Halleck, about three thousand only are fit for duty, and only five thousand of the original number remain, showing a loss of fifty per cent. Of the Twelfth Regiment, only twenty-eight are left, all the balance being dead, disabled, or prisoners to the enemy.

Special Selections.

Clinical Lecture on Pleurisy.

Delivered at St. Mary's Hospital, London, July, 1862, by THOS. K. CHAMBERS, M.D., Physician to the Hospital, Lecturer on Systematic and Clinical Medicine, etc.

Thomas G——, a day laborer, aged twenty-nine, was admitted June 19th, with anasarca of legs and belly of a fortnight's duration, and albuminous urine, which he attributed to exposure to the weather. The house-surgeon gave him a vapor-bath, a jalap purge, and some draughts of nitric ether and digitalis. When I saw him next day (June 20th) he complained of sharp pain on both sides of the waist, which he said had been coming on two days and was getting worse. On examination I found a pleuritic friction-sound beneath both scapulæ and in the lateral regions, but the normal respiratory murmur was still to be heard in spite of it. The friction-sound was a leathery creak, lasting through the whole of inspiration and the latter part of expiration. The tongue was furred, and there was thirst. He was ordered to be cupped ; but as the instruments had unfortunately gone to be mended, and would not return for an hour or two, a dozen leeches were applied along the lower edges of the ribs in the infrascapular region. Immediately they came off, a large poultice was placed all over the back of the chest.

The next day (June 21st) the pain and fever were quite gone, and the friction-sound was heard over only a limited space, and on the 22d had departed altogether. The poultice was continued one more day, as the patient remained in the hospital to be treated for albuminuria.

Pure fibrinous inflammation of the pleura, usually called Pleurisy, without any affection of the pulmonary tissue, you do not often have an opportunity of seeing in the hospital wards. But you know, from your experience of post-mortem examinations, how common it must be. There are few even of the most healthy chests in which you do not see old adhesions of the pleuritic surfaces, the relics of pleurisy—sometimes in one part, sometimes in another—sometimes partial, sometimes universal,—but so common, that they were supposed to be the normal condition of the part when morbid anatomy began first to be studied. What is the reason, then, that you have so few opportunities of learning how to treat this so common disease while you are *in statu pupillari?* Simply because it is scarcely ever so severe as to bring the patient into our hospital wards, so that your only chance of observing it is when it is joined with some more alarming disorder. The man who is the occasion of these remarks would never have been admitted here had he not been taken dropsical at the same time that he caught his pleurisy.

Ninety-nine cases out of a hundred, pure pleurisy begins and ends with a catching pain in the side on inspiration, and a slight inflammatory fever; making the patient coddle at home and take slops, but not employ a doctor. It would, however, be much better for him if he did, for sometimes the illness may turn out a more serious affair, and always the pain in the side and the fever may be shortened by good management and lengthened by bad.

For example: Blisters at the commencement of pleurisy invariably protract the duration of the inflammation, and make it more severe. The property of cantharides is to cause and augment that very fibrinous state from which the membrane is already suffering. Exposure to cold, and to changes of temperature by baths and the like, makes it worse, as do strained postures of the body and exercise. Opiates also cover up the evil with an anæsthetic mask, and prevent the patient knowing how he really is. Mercury, again, is an unnecessary call upon the whole system to make destructive sacrifices for the sake of a very small and not important member. Purgatives do no good, and expose patients to take cold at the watercloset.

On the other hand, the treatment you saw applied gives decided and immediate relief, and prevents the danger of the disease continuing.

It is necessary, however, to remark, that the whole of it was not directed to the pleura; the vapor-bath, the diaphoretic draughts, and the jalap were intended to relieve the anasarca of the skin, and were successful in so doing; while the treatment to which I specially design to call your attention as that appropriate for pleurisy, is the application of leeches and the poultice.

The object of leeching and all bloodletting is to relieve that inflammatory congestion, which is not only itself an evidence of loss of vital power, but is also the cause of further loss of vital power by leading to the other steps of the inflammatory process. The bloodvessels are unable to empty themselves with their usual elasticity, so you roughly take the place of vital power and empty them artificially. You may perhaps say, that is all very well in external inflammations, when you can directly draw off the blood which is causing the "rubor" and "tumor" visible to the naked eye, but you may doubt how the pleura, especially the pulmonary pleura, is to be affected by depleting the capillaries of the skin. It is such a long way round before you can find any vascular connexion between the parts, that you may suggest that local bloodletting is only beneficial by detracting so much blood, and that a small venesection would be more convenient and equally effectual. Now, it is not at all necessary to have a vascular connexion between separate parts for altered states and conditions of life to be propagated from one to another. I have seen in the dead body a round, circumscribed spot of costal pleura affected with fibrinous inflammation, and this had spread—not to the adjoining surface of serious membrane—not to that tissue intimately one with it in vascular connexion—but to the opposite surface of the lung, between which and its substance lay the great gulf of the pleural cavity,—the great gulf, anatomically speaking, but not physiologically, as proved by this instance. Now, if this gulf can be spanned by disease—the negation, the deficiency of life,—shall it not be yet easier stepped across by the remedy, the renewer of life? I do not myself feel any hesitation in believing firmly what experience seem to teach, that in inflammations of serous sacs depletion applied to th external surface has a power proportionate, not to the quantity blood taken, but to the locality.

I have called the local detraction of blood a "renewer of life," an I think it is but fair to explain in what meaning I so speak of i Doubtless, the taking away the vital fluid is taking away part of th body, and so is directly a destructive agent. But, then, blood thu lost from an inflamed part is not all loss; it is black, "melanosed, partially dead and unfitted for the purposes of life, and only a portio of it can really be called living. Then, again, granting that loss blood is a direct loss to a living body, still the indirect gain is a fu compensation to cases where it is rightly applied. The bloodvesse resume their elastic force, the blood-stream is restored, and loss substance is a regaining of function; so that a destructive, becomes i the end a constructive remedy.

In the action of poultices there is no even seeming paradox t stumble at. Continuous steady warmth is the most direct agent w possess of vital development. It not merely encourages vital growt but makes that growth take a higher form of life. Mr. Higginbotto found that different detachments of tadpoles, kept in the dark, ar treated with different degrees of temperature, threw off their tails ar branchiæ, and developed lungs and became frogs, with a quicknes exactly proportioned to the warmth they were subjected to. Warmt especially when kept steady and even by moisture joined with it, h the same effect on the failing life of tissues in the higher animals. raises and restores it to its normal force of development. It renew the injured membrane, which had been lowered to that condition w call congestion or inflammation, into the higher life of warm-blood circulation. As it developed the tadpole into the frog, so it develop the half-killed diseased part into full life.

But you must take care not to follow up the application of invigo ating warmth by the depressing influence of cold, or it becomes doub depressing by contrast. Your poultice must be kept on hot, and k till all pain has gone, and the breath can be drawn quite freely a easily. And it will do no harm to induce your patient to retain even a little longer, as was done in this case. Such means will n fail to cut short an attack of pure pleurisy.

But you will say, there are cases of pleurisy which are *not* c short; and notably just now there is one a few beds off the last p tient, whose case I will extract from the case book:

"John C——, aged thirty-four, navigator, always enjoyed goo health till six months ago, when on the third day after lying in damp bed he was seized with a violent sudden pain in the right sid which obliged him to take to his bed. He was in bed a fortnight, a was treated with mustard plasters. He coughed up a good deal frothy sputa, and was a little delirious several nights. The pain th left the right side and settled in the left, but did not prevent his g ting to work a month after the first attack. His work has not bee hard, and he has continued at it, with an occasional day's exceptic till he was admitted June 25th. The principal trouble he has had, and the cause of his being off work sometimes, has been dyspnœa. He has pain on bending forward and on drawing a deep breath.

"On examination of the chest in a sitting posture, there is very absolute dullness of the lower half of the lateral and scapular and of the whole infra-scapular region on the left side. The rest of the thorax is resonant. When he lies on his belly and puts the shoulders below the level of the chest, hanging his arms and head down, this infra-scapular region becomes more, but not quite resonant, showing that the course of the dullness is, in part at least, due to fluid which moves about by the force of gravity. Still some dullness remains, and there is a whiffing sound with inspiration and expiration; and in the lateral region the dullness remains unaltered by any position."

The pathological history of the case appears to me this: that the man was attacked with double pleurisy, worse apparently on the right side than the left; that the treatment relieved it; but that the left side being the least attended to, the inflammation spread to the pulmonary tissue, and caused its insidious condensation. The cause of the dullness on percussion is partly fluid, which is affected by gravitation—partly solidified lung, which is not so altered in its position. The fluid in the pleura and the condensed pulmonary tissue have mutually kept one another from being restored to life.

Such is the most ordinary cause of long cases of pleurisy made chronic. The longer they have lasted, usually the more obstinate they are in yielding.

As respects treatment, you will find on the card the following, which may be considered as the "*processus integer*," as Sydenham calls it, of such cases:

"June 25th—Empl. cantharides (62 pollices) lateri.

"℞ Misturæ poiassæ nitratis, ℥ j.
Tinct. ferri sesquichloridi, M. xv. Ter die.

"℞ Pilulæ hydrargyri,
Scillæ,
Pulveris digitalis, aa gr. jss. Omne nocte et mane."

You will observe that the drugging is a union of destruction and construction, so as to try and alter as far as possible the whole habit of the system—to cause by destruction a demand for new material, the supply of which is guaranteed by the iron. The mercury causes a general increase of metamorphosis, the waste from which is directed to the kidneys by the squill and nitre. The digitalis tends to relieve congestion by increasing the activity and tone of the blood-stream. So that by a union of virtues, the combination prescribed in the pills will rarely fail to prove a powerful diuretic. The blister which has been put on the side will probably have to be repeated once, and perhaps again. You will observe, however, that I shall leave a considerable interval between each blister. I shall not apply first one on the side, then one on the scapula, then one beneath the collar-bone, stroke upon stroke, one as fast as the other comes off. This is not an uncommon practice, and the object of it is to save time, to get the two or three blisters which have to be put on over as soon as possible. I do not myself adopt it, and I will tell you why, as the reasons give a very good example of the restorative system of medicine which is intended to be taught in this course of lectures.

The action of vesicants is first to destroy the epidermis, and to cause the exudation of a fibrinous serum beneath it. Very probably a similar but more remote effect is produced on the neighboring tissue of the pleural sac. But it is not at this stage of the process that the chief benefit occurs. If you watch carefully the line of dullness marking the upper margin of the collection of fluid in the chest, you will find that it falls—not when the blistered skin is full of liquid, and is discharging serum—not when the counter-irritation may be concluded to be at its height, but after it is all over. As the sore heals, then the level goes down with the greatest quickness. That is to say, that the true use of blisters in such cases is to start a healing process, a renewed life, on the outside skin, in order that it may be propagated to the neighboring viscus inside. As long as this healing influence continues to be exerted, you would gain no time by a recommencement of the process, and your too hurried repetition of blisters would add to the patient's distress, without conducing to his cure. Wait, then, till the effect of one blister has quite gone off before you order another.

Another case of pleurisy which has occurred this week I do not cite as possessing any influence in a therapeutical point of view, for it was rather an instance of the weakness of our art.

Charles D——, aged eight, was admitted on June 24th, with pyæmia after scarlet fever affecting the principal joints, and an incipient slough on the sacrum. On July 1st he died. At the request of the parents, the curator cut into one only of the joints, which was tense with creamy pus. On opening the chest, serum filled with flakes of fibrin gushed out from the right pleura. Bands of soft, elastic, straw-colored fibrin, of an inch in length, united the opposite side of the whole pleura, and coated the surfaces with a honeycombed layer. The lung was pressed back against the spine, was non-crepitant, inelastic, and tough. Now, the front of this boy's chest had been examined on the day of admission by myself, the house-surgeon, and the clinical clerk, and I can not but feel sure that had pleurisy existed there at that period we should have found it out. Afterwards, the wailings of the poor child at the idea of being touched became so piteous, and the torture of moving the arms would probably have been so great, that an examination to discover the cause of the pain he complained of in the side was out of the question. The day, then, when the pleurisy came on is unknown, but it must have been less than a week before decease. What an amount of disorganization to have happened in such a short time! What a quantity of serum and fibrin to be formed! What a destruction of pulmonary tissue in consequence! Pyæmia is certainly the most furiously destructive of idiopathic poisons; but yet, before seeing it, one would scarcely believe the swiftness of its action to be so great.

The moral is: if the march of death is so hasty, let there be no delay in your remedies. Apply your cupping, or leeching, or *faute de mieux* venesection, your bedding and your poultices, your slops and your diuretics, without losing a minute. Do not hesitate and trust patients to Nature, in any disease; but least of all in acute pleurisy. —*London Lancet.*

Witch Doctors of South Africa.

Those skilled in the ancient lore which describes the "*Dardianæ artes*" of earlier times will find a special interest in a report by Dr. J. P. Fitzgerald, Superintendent of Native Hospitals in South Africa, of the means taken by the Witch Doctors of the interior to cure a child affected with tumor of the jaw, who subsequently came under his care. This report, made to the Government, was justly thought by the Lieut.-Governor to be of sufficient value to be printed as a "Government Notice." The details are of grotesque interest. The report runs thus:

Gushinduka, a Tambookie native, belonging to the Chief Joe, living beyond the Bashee, having in vain consulted ten of the most distinguished members of the native faculty about a tumor which was growing on the upper jaw of his child, pushing up the lip, undertook a journey to King William's Town, a distance of about 120 miles, to consult the medical officers of the Native Hospital.

Gushinduka stated that the tumor had been growing about three years. The first doctor he consulted was Dr. Slegasa, a Fingo docter of the Umbo tribe, of great repute in the country. He sent two assegais as a fee, with the messenger, to request his professional aid. The doctor responded to the call, and presented himself in full costume, with a baboon's skin on his head, a kaross of wild animals' skins round his waist, and cows' tails round his arms, his face having been previously spotted with some black pigment.

On the arrival of the doctor, and before he examined the patient, a cow was slaughtered, of which the doctor and his attendants plentifully partook, in order to strengthen the stomach, and make him more powerful in his exertions for the patient. This is a most important part of the proceeding, and it is supposed that the more liberal the friends are, and the larger the fees, the more attentive and successful will the doctor be in his attendance on the sick person. The doctor, having fortified the inward man, proceeded to investigate the cause of the complaint, by assembling the people for a witch dance. They collected in a ring, and the doctor commenced dancing in the centre, and snuffing up the air with his nostrils; after dancing some time, invoking the spirits, he listened attentively to what they had to say, and then pronounced his opinion as follows:

"The child dropped one of its teeth one day while playing with another child; that this child took up the tooth and gave it to its mother, who delivered it to a river snake, and that this snake caused the tumor to grow on the child's jaw; and also that the snake had still possession of the said tooth; and further, that the snake lived in a hole in the bank of the river."

This woman was suspected of having done this out-of revenge, because Gushinduka, the father of the child, caught her twice stealing mealies in the garden: the first time he forgave her; the second time he made her pay one of those karosses with chains down the back.

The doctor was requested by the father to proceed to the river and recover the tooth—a step all-important for the cure of the disease; and he gave him another assegai, as a fee for his trouble. The doctor, after searching for some time, said he could not succeed, as the snake had departed with the tooth to some other part of the river. He then said he should apply some medicine to the tumor, which proved, however, ineffectual. This doctor soon took his leave of the patient, declaring his inability to cure the disease, owing to the snake having possession of the tooth.

Dr. Queleshe, a Pandomise doctor, was next consulted. He was a man in extensive practice, and enjoying considerable reputation; in fact, both he and Dr. Slegasa had often to undertake extensive journeys on professional business. The first fee sent in this instance to call Dr. Queleshe was a goat. The doctor answered the call, and presented himself with a jackall's tail on his forehead, and his face spotted with black pigment. Dr. Queleshe also had a witch-dance; and when it was concluded, he said that the spirits of the child's grandfather and relations who were dead were in want of food, and that Gushinduka had never killed cattle for this purpose; that those spirits were angry on this account, and that it would be necessary, in order to propitiate them, to kill a bullock. This was done, and the entire ox cooked and eaten by the assembled people. The doctor had the head, together with the entire inside and a large supply of the flesh, set aside for himself and his attendants. The spirits of the departed friends who had caused the tumor to grow on the child's jaw were supposed to join in the feast. This sacrifice to the spirits had no effect, however, on the tumor, which continued the same; and Dr. Queleshe, having applied some medicine to the tumor, returned home. After the lapse of a few days the father applied again to Dr. Queleshe; but the doctor said he was unable to do any more for the child.

Dr. Oli, a Kaffir doctor, was next consulted. He gave it as his opinion that some spirits which were in alliance with the child's aunt (a different order of spirits from those of relations or friends) had done the mischief, because the aunt would not give her consent that those spirits should take the child, to which they had taken a fancy. The doctor then said that the spell should be broken, and all alliance between the woman and the spirits put an end to, otherwise the child would not get well. The woman was then taken to a place at some distance from the kraal, stripped of her clothes, and washed with some medicine. She was not allowed to take back her clothes, which were left in the bush. She was also given some medicine to chew and spit about in the air, in order to chase the spirits away; and when she went to sleep at night, she was to bite some of the root, and spit about, in order to drive those spirits away which used to visit her in her dreams.

But notwithstanding the prescriptions of these three eminent native doctors, no change was effected in the disease, which continued undiminished in size.

The child was taken into the Native Hospital, put under chloroform, and the tumor with a small portion of jaw-bone excised. The child has recovered, and has left with its father for the Tambookie country, the deformity of the face having been removed.

Gushinduka paid three cows, four goats, and five assegais, as medical fees in this case to native doctors.—*London Lancet.*

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On the Co-Existence of Tubercle and Cancer.

By D. RUTHERFORD HALDANE, M.D., Pathologist to the Royal Infirmary of Edinburgh.

Whether or not cancer and tubercle can co-exist in the same organism, is a question which has been frequently discussed, but which can scarcely be said to have been satisfactorily solved. Some pathologists, perhaps the majority, have maintained that the two diseases are mutually exclusive, that they depend upon different or opposite constitutional conditions, and that the existence of one indicates the impossibility of the simultaneous presence of the other. Others, again, have not considered cancer and tubercle as of so decidedly specific a character; and, while allowing that the two are seldom associated, are quite prepared to meet with cases where they shall be found to co-exist. It is not my object to endeavor to solve this question in an absolute manner; but a case which lately came under my notice has led me to bring together a few general remarks on the subject.

In speaking of the possibility of the co-existence of tubercle and cancer, it must of course be premised that the only cases to be referred to are those in which both diseases are in an active condition, for that one may succeed the other is perfectly well known, and universally acknowledged. The order of succession is not, however, indifferent, for, in the great majority of cases, tubercle is the original, cancer the secondary disease. This mode of sequence propably depends upon the circumstance that tubercle is generally a disease of early, cancer of mature or advanced life. In no small proportion of cases where cancer has been the cause of death, cretaceous concretions, or tubercle in a retrogressive or stationary condition, may be found in the upper part of the lungs. These cases, however, are not available in assisting us to answer the question proposed, for it is quite intelligible that the tubercular diathesis may have been recovered from, and that, therefore, there was no impediment to the development of the cancerous.

A-priori considerations would certainly lead us to believe that the presence of the one morbid condition is incompatible with the existence of the other. Neither tubercle nor cancer can be looked upon as a mere local condition; for even granting that either may be in the first instance generated by external causes, it can not be denied that when the dyscrasia has been once established, the manifestations in the two conditions are of a different character. Our views on this subject, however, must be regulated by the opinions we entertain as to the mode of origin of new growths—a question which lies at the very foundation of pathology.

The doctrine which, till lately, was universally accepted, was this: Owing to certain causes, known or unknown, an exudation from the bloodvessels takes place; in healthy persons, the matter poured out assumes more or less of the characters of the tissue in which it is effused, becomes converted into connective tissue, or degenerates into pus; while, if the system be under the influence of the tubercular or cancerous cachexia, the effused material is converted, under the influence of the constitutional condition, into tubercle or cancer, as the case may be. Granting this view to be correct, it seems impossible that cancer and tubercle could co-exist, for we can not well imagine that the system could be under the influence of two such different dyscrasiæ at the same time. Arguments, however, are not wanting to show that such a mode of viewing the subject is erroneous. Did new formations take place in the manner alluded to, every exudation in a tubercular individual would necessarily be tubercular; but every-day experience testifies to the contrary. Pleurisy, in a patient suffering from phthisis, is not necessarily or even generally tubercular; connective tissue is organized, and adhesions are formed in precisely the same manner as in an individual in whom there is no constitutional taint. It is indeed said, that as the blood is continually undergoing changes, an exudation at one time may be very different from what it was at another; and that even when the constitution is thoroughly cancerous or tubercular, simple exudations may be poured into tissues as the results of recent wounds or injuries.* This, however, would not explain another circumstance which is frequently met with. In cases of tubercular pleurisy, pericarditis, or peritonitis, the organized exudation will generally be found to consist of two parts, one portion being manifestly composed of tubercle, the other of ordinary, or what we may call healthy, connective tissue. Here the matters forming the new structures must, according to the exudation theory, have been poured forth from the same bloodvessels, into the same tissues, at the same time, and under the same constitutional circumstances, and it is inconceivable that if differences in the product depended exclusively upon differences in the inherent composition of the exudation, two such different materials could have been contemporaneously developed.

Another argument to the same effect is derived from what is seen in cases of constitutional syphilis. The system is here under the influence of a peculiar dyscrasia, which manifests itself by deposits or exudations of a particular kind, and by influencing in a peculiar manner certain of the vital processes. On the hypothesis we are now considering, any healthy action should, under these circumstances, be impossible, every exudation should bear the special syphilitic stamp. This, however, we know not to be the case; wounds may heal, and fractures unite, as rapidly and as soundly in the syphilitic as in the healthy.

The other doctrine, as to the genesis of new formations, has been most clearly ennunciated by Virchow. Its supporters maintain that an exudation is not poured out directly from the bloodvessels, but that every new growth takes its origin from the tissues themselves. Cells can no more arise in situations where no cells previously existed, than new organisms can be produced by spontaneous generation. It can scarcely be doubted that in the physiological renovation of tissues the principle of *continuous development* holds good; and the best investigations go to prove that pathological formations obey the same law. There is now an overwhelming mass of evidence with regard to the origin of pus; and the evidence is scarcely less strong in the case of tubercle and cancer. Why the new tissue should assume a peculiar form, we do not know. We know that when all is going on normally, the process of decay is exactly balanced by the process of repair; although the elements of the tissues are constantly undergoing change, this change takes place so silently, and so continuously, that the parts appear to remain always the same. But now let an irritant be applied to the tissue where everything was going on so smoothly. A tumultuous process is immediately set up; there is rapid destruction of tissues, but equally rapid repair; as Mr. Simon has well expressed it, "the *appreciability of the opposed results* is in itself a differential mark of inflammation."[*] The results even in the most healthy inflammations are, however, far inferior to the reproduction of tissue which goes on in health. The type of inflammatory products is invariably low; the higher tissues, such as nerve or muscle, skin or cartilage, are incapable of being thus produced. Now it is perfectly conceivable that the nature of the irritant may determine the character of the future product. Of this principle we have already some undoubted examples. The bite of a poisonous snake occasions an inflammation which runs on rapidly to gangrene. The irritation of a short hot pipe is believed to lead to epithelioma of the lip; while the frequent contact of soot leads to a similar affection of the scrotum. It is probable that this principle has wider applications than we are yet aware of, and that special forms of disease are often to be explained by something special in their causation.

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* Bennett's Principles and Practice of Medicine, third edition, p. 151.

No doubt there is a difference in the character of the tissues themselves which explains their greater or less liability to particular forms of disease. The tissues of the soundest and healthiest individual are susceptible of inflammation, but it is questionable whether the same can be said with regard to tubercle. It is doubtful whether the ordinary causes of tubercle, such as insufficient food and clothing, damp, cold, impure air, and deficiency of light, can develop the disease in a sound constitution, without the slightest hereditary taint. Virchow, indeed, believes that every dyscrasia has a local origin; in other words, that there is first a local disease, that *it* is the cause of the poisoning of the blood, and that when the poisoning has once taken place, various secondary phenomena, manifestations of the now established dyscrasia, show themselves. He denies that certain changes can persist in the blood, considered as an independent fluid, but maintains that, for the keeping up of a permanently morbid condition, there must be a permanent supply of noxious material from other sources. In pyæmia, for instance, the constitution of the blood is generally altered in two ways: there is the presence in it of small masses of fibrine derived from the disintegration of thrombi, and giving rise by embolism to metastatic deposits; and there is absorption of putrid juices, causing unhealthy and gangrenous inflammation. It can not be questioned that there is much truth in this doctrine, and it is possible that future researches may show that it is of general application; but in the present state of our knowledge this can not be said of it, for there are various constitutional conditions for which we have hitherto been unable to discover a local origin. This is especially true with regard to tubercle, for very often, before there is the slightest manifestation of local disease, a peculiar condition is established, which physicians have designated as the pretubercular stage of phthisis. The same is probably true with regard to cancer, though to a less extent, as the disease is less strikingly hereditary, and the early stage of the diathesis is less strongly marked. But, although there be an early stage of constitutional affection previous to the development of the local disease, it does not follow that the first stage is to be considered as special—that is to say, as the manifestation of a specific dyscrasia. It may, in fact, be nothing more than a condition of generally impaired nutrition and constitutional weakness (which may or may not be hereditary), which makes the individual more susceptible to the exciting causes of the particular disease.

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[*] Holmes' System of Surgery, vol. i., p. 6.

One who holds, though even in a somewhat modified form, the views of Virchow, has much less difficulty in acknowledging the possibility of the co-existence of tubercle and cancer, than one who clings to the exudation theory. I fully believe that both tubercle and cancer are to a certain or even to a great extent constitutional, and that the constitutional conditions connected with them are of a different character; still, I have no difficulty in believing that the two morbid conditions may occasionally co-exist. It is, however, only by an appeal to facts that a question of this kind can be decided, for no pathological laws are as yet sufficiently established to enable us to refer to them for a solution of such problems. So far as my own experience goes, I have never met with a case where I was satisfied that cancer and tubercle co-existed in an active form. Such cases have undoubtedly been recorded, and some unquestionably may have been instances of the kind; but I am satisfied that not unfrequently the observers were mistaken; in some, the characters of the morbid products having been misunderstood, in others the tubercle having certainly been in a state of obsolescence. In illustration of the fallacies to be guarded against, I subjoin a case in which a mistake might readily enough have been committed.

Mary L., aged 40, was admitted, on account of cough and debility, into the Royal Infirmary, under the care of Dr. Gairdner, on the 22d of April, 1862. She stated that, though not robust, her health had been generally good, but that since the birth of her youngest child (four weeks before admission) she had suffered from cough, accompanied with febrile symptoms. She stated that she had never had hæmoptysis, and had never suffered from pain in the chest.

When admitted, she was in a feverish condition, the skin was hot, the tongue dry and cracked. There was much cough, with scanty muco-purulent expectoration. On physical examination, there was no dullness on percussion, but the auscultatory signs of bronchitis were present, chiefly on the right side of the chest. About ten days after admission, percussion was found to be markedly dull over the right side. The following was her state on the 3d of May:

Countenance pallid, no lividity, no flush. Voice broken and hoarse. Respirations, 36. No very marked dyspnœa; lies equally well on either side, or on the back, the latter being her usual position. When closely interrogated, could hardly be brought to admit any pain during the course of her complaint; but, after leading questions, referred to the right side as the seat of a little uneasiness. Percussion quite dull over the right side of the chest from above the clavicle to the level of the nipple. Little respiratory sound in front, except above the clavicle, and there chiefly tubular. Sputum muco-purulent; mucus and pus about equally mixed; pus in flakes, not decidedly globular.

On the 2d of June her condition was the following:

Patient has occasionally tried to get up of her own accord, but has generally been obliged to lie down again soon. Is now very feeble and pallid; there is scarcely any flush whatever; febrile symptoms much less distinct than formerly. Tongue almost perfectly natural, but retaining marks of former cracking. Has still no complaint of pain; chief cause of suffering is cough, which is fully more severe than ever. The dullness on percussion over the right front is diminished, being replaced in part by tympanitic or dull tympanitic resonance. Auscultatory signs, pretty distinctly those of progressive excavation of right front. Expectoration has been increased in quantity, and has become more and more purulent, but is still frothy, and not distinctly globular in character. Last night, for the first time, the sputa were tinged with a little blood. Has had very little diarrhœa.

She became gradually weaker, and died on the 10th of June.

The opinion entertained of the patient's case during her life was, that she was suffering from acute phthisis, causing rapid breaking down of the substance of the right lung. The following were the appearances found on dissection:

Surface of the body very pale; abdomen wrinkled.

On proceeding to remove the right lung, firm pleuritic adhesions were found over the upper two-thirds of the organ; in separating these, a very superficial cavity in the anterior part of the lung was opened into. The upper and middle lobes of the right lung were found occupied by numerous communicating cavities exactly resembling such as result from the breaking down of tubercular matter. The walls of the cavities were irregular, coated with a soft yellowish matter, and in many places were crossed by fibrous cords, the remains of obliterated, or nearly obliterated, bloodvessels. In the pulmonary tissue between the cavities, were numerous small, opaque, yellow masses. The lower lobe of the lung was in a condition of solid œdema, but contained no deposit. In removing the lung, its root was found to be much thickened by a deposit which surrounded and separated the normal structures. This infiltrated matter was of a pinkish white color, slightly translucent in appearance, of softish consistence, and presented all the physical characters of cancer; on scraping it, an abundant creamy juice, readily miscible with water, exuded. The growth was found to consist of degenerated bronchial glands, which started from the bifurcation of the trachea and followed the root of the right lung; it extended for about half an inch into the substance of the lung, and there ceased abruptly. The normal structures forming the root of the lung were much compressed; the bronchus was converted into little more than a slit, and the pulmonary artery and veins were much diminished in calibre.

The left lung was perfectly healthy, containing no trace of abnormal deposit: the bronchial glands at the root of this lung were also natural.

The liver was healthy. The kidneys were of normal size; in each were several small rounded masses, about the size of pepper-corns, of pinkish color, and rather soft consistence. Other organs natural.

On *microscopic examination* of the creamy juice squeezed from the matter in the root of the right lung, it was found to contain an enormous number of naked nuclei, about $\frac{1}{2000}$ to $\frac{1}{1500}$ of an inch in diameter; there was a comparatively small number of rounded or oval cells, pale, but tolerably distinct, and each containing a nucleus similar to those floating loose; finally, there were a few compound granular corpuscles, and some granular matter. On the addition of acetic acid, the cells became still paler; the nuclei, on the other hand, were rendered more distinct, but appeared somewhat diminished in size. On examining some of the soft yellow matter from the right lung, which to the naked eye bore a strong resemblance to tubercle, no distinct cells or nuclei could be seen; it appeared to consist entirely of broken-down matter, mostly granular, but in some places having a tendency to obscure fibrilation, with some compound granular corpuscles. The structure of the nodules in the kidneys was found to be precisely similar to that of the degenerated bronchial glands in the root of the right lung.

It must be allowed that this case was in some respects a very deceptive one. Without speaking of the symptoms, the appearances presented on dissection were at first precisely such as are found in tubercular disorganization of the lung—adhesions of the pleura, a large cavity broken into during removal, the walls of which were lined with a soft cheesy matter and crossed by obliterated bloodvessels, seemed to leave little doubt as to the nature of the case. But when the root of the lung came under observation, its condition was evidently due to cancerous affection, beginning in the glands, and extending into the substance of the lung. Was this, then, a specimen of conjoined cancer and tubercle? I think not. The microscope showed distinctly the cancerous nature of the glandular disease, but threw no more than a negative light upon the condition of the lung. It must, ver, be borne in mind that the histological characters of tubercu- eposits are frequently ill-defined, particularly where considerable tegration has taken place. Accordingly, as the absence of the lled tubercle-corpuscles could not be considered sufficient evidence e non-tubercular character of the deposit, its nature had to be ed upon from other considerations. And here a point of great rtance was the absolute limitation of the deposit to a portion of ung. We not uncommonly find one lung in an advanced state bercular disease, while the other is comparatively unaffected; but uld, so far as I know, be unprecedented, to have *absolute* freedom disease in one lung, while the other was in the condition observed is instance. Under these circumstances, and as there was no trace bercle either in the lymphatic glands or in the intestinous mucous brane, I had no hesitation in coming to the conclusion that the ion of the lung was non-tubercular. If not tubercular, what then it? The idea of cancer naturally suggests itself; but this, too, I , must be negatived. In a pretty extensive experience of cancer of ng, I have never seen it produce destruction of the character met in this case. Cancer is generally found in the lung in the condi- of nodules or of infiltrated masses; in but few cases is softening l to have taken place, and when met with, it has been rather the t of a process of sloughing than of a comparatively slow and grad- isintegration; softening of cancer, when it does occur, takes place apidly to allow the neighboring bloodvessels to be sealed up. The oscopic appearances were also opposed to the identity of the de- s in the root of the lung and in its substance. Had the growth e lung been cancerous, we should undoubtedly have found cells, ore probably free nuclei, to testify to what had been the original cter of the lesion.

n the whole, I came to the concusion that the disease in the lung the result of a low form of inflammation, determining the pres- of a fibrinous material which subsequently underwent disinte- on. It is now generally recognized by pathologists that all cases -called pulmonary phthisis do not result from tubercle, but that are occasioned by a low grade of the inflammatory process. I ve that this was the case here, and that the pressure upon the rtant parts in the root of the lung was the determining cause of esion. I have more than once seen cases where the pressure of an rism on the root of a lung has been connected with very similar arances, and where the entire absence of tubercle from other ns rendered it highly improbable that the deposit was specific.— *burgh Medical Journal.*

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The Habitual Use of Alcohol.

here is an apparent discrepancy—which will surprise none but in- erate teetotalers—between the deliverance of mere chemists or iologists on the subject of alcohol and that of practical physi- . There is a great difference between a purely chemical or phy- gical view of man and his wants, and the view which physicians in actual practice have presented to them of man in hard and matter-of-fact conflict with things as they are. It is admitted that for a man whose object is to do an occasional feat of mind or body—*e. g.*, the chess-player or the prize-fighter—the right thing is to abstain entirely from alcohol. But for most people, whose business is not to do feats occasionally, but common work constantly and cheerfully and for the longest possible time, the right thing may be to take a moderate quantity. This has not yet been proved, but it is quite conceivable, and we are ready to pay as much heed to the opinion of serious and unbiased physicians in this matter as to that of chemists and physiologists. Whatever the truth on this point, it is matter of satisfaction that there is an important concurrence of weighty opinion in favor of extreme moderation; that whereas the question used to be between much alcohol and little, the question now is between a very little and none at all. There is no medical man now with a reputation to lose who would venture an apology for the habitual use of more than a very little alcohol, and this in a very diluted form. If there are any representatives of that old race of convivial monsters who could imbibe three bottles of wine or a score of glasses of punch or toddy, who thought no shame of falling under the dinner-table and needing to have their cravats loosed and their necks adjusted by the attendant page, let them know that their habits involve as great a violation of all sense and science as of manners and fashion. Such practices are as unfashionable in our day as buckled shoes and short-clothes; and, so far from being considered conducive to health, are associated only with insanity or disease. The injuriousness of the habitual use of alcohol in any but the smallest quantities, and these well diluted, is a point on which chemists, physiologists, and physicians are all agreed. It is to be inferred from what the chemists have already established, that the great thing that the system does with alcohol is to effect its removal as soon as possible. If the quantity is not excessive, its removal is probably complete; if it is excessive, some is left in the substance of the brain, the liver, the kidneys, etc. The physiologists, again, tell us that the smallest quantity of alcohol takes somewhat from the strength of the muscles, from the ability to endure extremes of temperature, from the clearness of the head and the activity of the mind. And, as physicians, we know how soon the immoderate use of alcohol tells against the body, encasing it with a layer of fat or lard, destructive of all fineness of outline, either of feature or figure; and, worse than this, causing the deposit of fat or oil in the fine structure of the internal organs—the tubes of the kidney, the fibres of the heart, the cells of the brain and liver—those organs, be it observed, in which chemists have detected the residue of the alcohol not removed by the excretory organs. We think it a most significant fact, one that has not been sufficiently considered, that the organs in which alcohol is found, after being taken in large quantities and only partially eliminated, are the very organs whose structure is known to suffer from the use of it, and the impairment of which lands so many drinkers in Bright's disease, heart disease, delirium tremens, paralysis, and hob-nail liver. The conversion of fine structures, such as gland-cells or muscular fibres, into fat, seems to be one of the natural ways in which, in process of time, organization deteriorates, and life declines. It is a change which we properly associate with age, but it is strikingly favored in many persons by what would be regarded as a very moderate use of our stronger beers or of ardent spirits. Alcohol seems to do the work of time.

All these facts indicate the wisdom of using alcohol in any form with extreme caution, and of preferring the milder preparations of it. They go far to justify the strong language employed by Dr. Paris many years ago in reference to ardent spirits: "The art of extracting alcoholic liquors by distillation from vinous liquors must be regarded as the greatest curse ever inflicted upon human nature;" and they seem to show that no wiser measure, or one more worthy of a serious and observing statesman, has been enacted than that introduced by Mr. Gladstone, for, among other purposes, facilitating the importation into this country of the lighter wines of the Continent, and so displacing the absurdly strong drinks in which it is our national custom to indulge.—*London Lancet.*

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Treatment of Disease by Oxygen Gas.

From a letter on this subject, published in the *Cincinnati Commercial*, we take the following:

Surgeon George G. Shumard, Medical Director of Danville District, suggested and instituted the experiment of administering oxygen gas by inhalation. Having in my possession a copy of his official report upon the subject, I take the liberty of transmitting the following extracts from it, which I hope will be sufficient to show who originated the important experiment referred to:

"Nov. 29, 1862.—I have frequently had occasion, in the course of my medical practice, to observe the apparent great want of oxygen in the blood drawn from patients laboring under different forms of autumnal disease. Impressed with the belief that this deficiency was not merely apparent, but real, and that blood, thus unfavorably constituted, if not the cause of disease, could not otherwise than exercise a very prejudicial influence upon the system, I several years ago instituted a series of careful comparisons between healthy blood and that drawn from patients laboring under different forms of autumnal disease, and succeeded in fully satisfying myself that such a deficiency really did exist, and that there was an excess of carbonic acid in the blood of all the cases examined. It therefore occurred to me that if oxygen gas could, by any means, be artificially supplied to the circulation, it might afford a valuable remedy in the treatment of autumnal and various other forms of diseases. It also occurred to me that the best channel for administering the remedy would be that which nature has herself established for the reception of oxygen—the lungs. I therefore resolved to try the experiment as soon as a favorable opportunity presented itself.

"In 1857, I was called to see a case of severe congestive chill, in which the patient, a man about 30 years of age, was cold and nearly pulseless. Active stimulants and other remedies usually employed in such cases were freely resorted to. A small quantity of nitrous oxide gas was also prepared, and administered to the patient by inhalation. Shortly afterwards the pulse increased in volume, and in about one hour from the time of the inhalation the extremities became warm, and the patient recovered from his chill. As other remedies were here employed besides the gas, and may have exercised an important influence in relieving the patient, I concluded to await the result of other experiments before publishing the case.

"Shortly after this, my duties called me to another portion of the United States, and I had no further opportunities for repeating the experiment until the 22d of the present month.

"Last summer, while acting as Medical Director at Huntsville, Ala., I repeatedly urged the employment of the gas in the treatment of disease. The different medical officers stationed at that post were favorably impressed with the idea that it might be made a useful remedy; but, from some cause or other, the gas was not administered. I also requested Dr. Newman, a highly accomplished private physician of Huntsville, to employ the remedy in such cases as he might deem favorable for its use. A number of physicians in Cincinnati were also urged, a year ago, to administer the gas in cases of disease.

"On the 22d instant, a case of typhoid fever (Case No. 1), of a hopeless character, was reported from Danville General Hospital, No. 3. As the patient was apparently dying, and could not, therefore, be in any way injured by the experiment, I resolved to try the effects of the gas. Assistant-Surgeon Devindorf was accordingly directed to administer the gas to him immediately, which he did, in the presence of Assistant-Surgeons Samlere, Aichele, and Simpson. The results were so striking in character as to impress every one present favorably with the remedy. I may here remark that two of the medical officers present, who were at first decidedly skeptical upon the subject, upon witnessing the result of the first experiment, immediately changed their opinions, and became enthusiastically in favor of the remedy.

"As soon as the favorable results of the gas began to exhibit themselves in case No. 1, Assistant-Surgeons Samlere, Aichele, Devindorf, Simpson and Avery were directed to visit the different hospitals in Danville, and, after having carefully examined the worst cases of disease in each, to select such for experiment as were considered entirely hopeless. They accordingly reported to me cases Nos. 2, 3, 4, 5, 6, and 7, to all of which the gas was immediately administered. The reports of all these cases are now before you, and from them you will be able to judge whether this remedy is or is not worthy of more extensive trial.

"Without attempting an analysis of these cases, I will merely remark that all the patients to whom the remedy was administered were pronounced hopeless by their attending physicians, and that their judgment in the matter was fully confirmed by that of the committee appointed to examine the cases before the gas was inhaled; that a striking improvement was observed in every case after the gas was administered; that under its influence warmth slowly returned to the extremities, after the most powerful diffusible stimulants that could be given had failed to produce that result; that the pulse increased its volume, and became much more natural to the touch; that the delirium which had, in several cases, existed for weeks previously, entirely subsided; that the involuntary discharges from the bowels, in all but one case, ceased; that several of the cases, after lying for many hours delirious, or insensible, became rational, and conversed with those around them; that the countenance assumed a much more natural expression; that the livid spots upon the chest and abdomen of two of the cases changed to a light rose color, and commenced disappearing; that the patients all expressed themselves as feeling much better; that the effects of the gas were not merely temporary, but permanent; that in the four cases that have died, life was apparently prolonged many hours by the remedy; and that three out of the seven supposed fatal cases are still living and may yet recover.

"I propose to continue the experiments, and shall hereafter not confine them alone to cases that are considered hopeless.

"Although it has thus far been tried in only eight cases, the results are sufficient to prove that we have in oxygen gas a remedy of surprising power, and one that bids fair to be of great service hereafter in the treatment of almost every variety of disease.

"The gas was administered to all the cases in the form of nitrous oxide, which was made in the usual manner, from nitrate of ammonia, by Prof. Brikford, of Danville, and Assistant-Surgeon Semlere, U.S.V. For want of better apparatus, it was administered to the patients from beef bladders, which answered the purpose moderately well.

"Although the oxygen was employed in these cases in the form of nitrous oxide gas, I would not propose to use it so in all cases. In cholera and severe cases of congestive chill, I am persuaded that oxygen gas, in its pure form, or slightly diluted with atmospheric air, would be better; nor would I hesitate to give it in any form of disease in which the vital powers are depressed, since the cases recorded show that it relieves delirium and irritation, instead of producing them." . . . . .

Such are the facts of the case, which can be certified to, if necessary, by every medical officer stationed at this post. Since the above report was written, the gas has been administered to a large number of patients here, and in every case with good effect.

I am, sir, very respectfully, your obedient servant,

EDWIN HOLMES.

—o-o—

Influence of a First Impregnation on Succeeding Offspring of Mother.—Mr. Bullock Webster, writing to the *Times* from Algiers, on the subject of marriages of consanguinity, confirms the well-known facts of the influence of a first impregnation on the character of all succeeding offspring by the same mother. "The system," he says, "of breeding in and in, so far as my *experience* goes, even in what may be considered the finest bloods, has always produced greater aptitude to fat, small bone, and tendency to disease. Clever physiologists may account for this, but I should like to know how they can explain this one significant fact, viz.: that an Arab mare that has once had a colt by a half-bred horse can never again breed a pure Arab; the colts, even after any number of years, always taking, to some extent, after the horse she first bred by. The same rule holds good with regard to all our breeds of short horns or Hereford cattle, Leicester or Southdown sheep, Fisher Hobbs' pigs or his pointers."—*Med. Times and Gaz.*, Sept. 6, 1862.

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General Pathology of Eruptive Fevers, and the Principles that should Govern their Treatment.

Read to the Chicago Medical Society, November 7, 1862, by N. S. Davis, M.D., Professo Clinical Medicine, etc.

The diseases directly alluded to, under the head of eruptive fevers, in this paper, are Variola, Rubeola, and Scarlatina. Their great relative importance is shown by the fact, that in England and this country, and probably throughout all the civilized countries, from *eight* to *ten* per cent. of the entire mortality arises from these three diseases.

A glance at the statistics of mortality show another interesting fact, namely, that while one of those diseases is most prevalent and fatal one year, and another the next year, the annual aggregate mortality from them all remains nearly uniform. It also appears from the same statistical tables, that while the mortality from small-pox has been greatly diminished by the general practice of vaccination during the last half century, the mortality from scarlatina, rubeola, and hooping-cough has correspondingly increased, thereby maintaining the annual aggregate nearly the same. This has led Dr. Gregory, and some others, to claim that there exists among the class of acute eruptive fevers a "law of compensation," or vicarious prevalence. Aside from the intimate relation which the several eruptive fevers bear to each other, as shown by the statistics already alluded to, there are several interesting characteristics common to them all:

1st. While they often occur epidemically, they are all propagable by contagion.

2d. There is in the human species an almost universal susceptibility to these fevers. The most liberal estimates do not claim, as exempt from susceptibility, more than one in sixty of the entire population.

3d. While there is an almost universal susceptibility to each of the diseases under consideration, such susceptibility is permanently destroyed by a single attack. Hence it is very rare that the same individual is attacked twice by the same eruptive fever.

4th. Each of these diseases are not only self-limited in duration, but they present several well defined stages or epochs: as the period of incubation, the premonitory fever, and the period of eruption.

These several characteristics plainly indicate the fact, that this class of diseases arise from exciting causes of a specific and uniform character; causes which are generally ranked as animal poisons, and capable of being reproduced in the body of the sick. They may be introduced into the system either by contact with the cutaneous surface, or by inhalation and absorption from the pulmonary mucous membrane.

When introduced into the blood by either of these methods, even in extremely minute quantity, no immediate appreciable effect is produced; but in a period varying from four to fourteen days, it becomes multiplied in the blood to such an extent as to disturb the susceptibility of all the organized structures of the body, thereby causing all the symptoms of an active irritative grade of general fever. That these poisons do thus affect the blood, and through it the properties of all the tissues, is demonstrated by the fact that inoculation with the blood of patients laboring under the active stage of rubeola and scarlatina, communicates the same disease to the person inoculated. By what process these poisons are multiplied in the blood during the period of incubation is not known. From an early period, it has been regarded as analogous to fermentation in vegetable matter. This idea was distinctly inculcated more than two hundred years ago, by Sydenham and Diemerbrœck. In modern times, it has been revived and rendered somewhat popular by Liebig.

From the supposed analogy to the process of fermentation, the process of incubation in the eruptive fevers has been called *zymosis*, from the Greek word signifying *ferment*; and they have been styled *zymotic* diseases, by a large class of modern writers.

Whether there is any reality in the analogy here alluded to or not, it is quite certain that by some process the smallest quantity of variolous, rubeolous or scarlatinous poison introduced into the blood undergoes such rapid and extensive multiplication as to induce in a few days a high grade of febrile excitement throughout the whole system. At the same time, it effects such a change, either in the composition of the blood or the susceptibilities of the tissues, or both, as to destroy all influence of the same poison at any future period. In addition to the action of eruptive fever poisons on the susceptibility of the tissues generally, they all display a special affinity for the cutaneous structures, in which their presence induces more or less inflammation, constituting the eruption. The affinity of those poisons which give rise to the pustular form of eruption, as the variolous, is so strong as to cause their lodgment in the skin during the first four days of the febrile action, and their consequent removal from the mass of the circulating fluids. This causes simultaneously a subsidence of the general irritative febrile action, and the development of a local pustular inflammation at each point in the skin where the poison has been deposited. If all the poison is thus early removed from the blood, on the appearance of the eruption, the apyrexia becomes complete, and the patient remains free from fever until the intensity of the cutaneous inflammations renews more or less general febrile action. But if, as sometimes happens, some of the poison fails to be deposited in the skin and continues in the blood, the subsidence of the fever will not be complete on the appearance of the eruption, but *will continue with* more or less severity, accompanied by progressive deterioration of the blood, and all those symptoms set forth by authors as characterizing the malignant form of variola.

The poisons producing the eruptive fevers of the exanthematous variety, such as rubeola and scarlatina, display a similar affinity for the skin, and in addition also for the mucous membrane of the fauces and larger bronchial tubes; exciting in these structures more or less inflammation of a specific character, but do not become deposited in these tissues to such an extent as to free the blood from their presence, or to relieve the other structures of the body from their irritating effects. Consequently, there is, in these diseases, no abatement of the febrile symptoms, on the appearance of the rash or local inflammation in the skin. On the contrary, the fever continues in full severity until the eruption itself begins to decline. That the specific poison continues in the blood during the eruptive as well as premonitory stage, such would seem to be demonstrated by the fact that these diseases can be communicated to healthy persons by inoculation with the *blood* of the sick. That it is finally expelled partly through the skin and partly through the kidneys, we have no doubt. That the latter organs take part in the process of expulsion of the poison, and consequently suffer much derangement of their function thereby, is countenanced by the fact that in a large proportion of cases, especially of scarlatina, the urine becomes albuminous during the progress of the disease. And dropsical effusions, produced by deficient and unnatural renal secretions, are well known to be among the most frequent sequalæ of these fevers.

With these explanations, we may sum up our views of the pathology of the eruptive fevers as follows: 1st. There is an exaltation of the elementary susceptibility of the organized tissues of the body, with a perversion of vital affinity, as indicated by an active grade of irritative fever and disturbance of the great functions of circulation, secretion, innervation, and calorification.

2d. This general disturbance, called *fever*, is the result of the action of a poisonous material circulating in the blood, altering its properties, and consequently its relation to all the tissues; and, finally, manifesting a special affinity—first, for the skin; second, for the mucous membrane and glands of the fauces; and third, the kidneys.

3d. The special affinities here mentioned, cause an early lodgment of more or less of the poison in the cutaneous tissue, and the consequent development of specific inflammations in the form of exanthems, vesicles, or pustules. The affinity, especially of the scarlatina and rubeola poisons, for the mucous membrane and glands of the fauces, is scarcely less uniform; and owing to the greater vascularity of the structures, often results in the development of inflammation of far greater intensity and danger than that in the skin. Whether these poisons possess a special affinity for the structure of the kidneys, as indicated in the second proposition, or whether the irritation of those organs, resulting in the scantiness of secretion, albuminous urine, and ultimate uræmic poisoning or dropsical effusions, is simply the effect of an effort on the part of the secreting structure of the kidneys to eliminate the poison from the blood, we may not be able to determine.

4th. The more complete the lodgment and isolation of these poisons in the cutaneous texture, in the early stage of these diseases, the more mild will be all their subsequent progress. On the other hand, the less perfectly the poison becomes lodged in the skin in any given case, the more persistent will be the general febrile action, the more rapidly will the whole mass of the blood become impaired in its properties, and consequently the greater will be the danger of serious internal complications, or of the supervention of typhoid and malignant symptoms.

If the foregoing general summary is correct, or even proximately so, it affords a basis on which can be founded some important practical maxims for the treatment of this very important class of febrile diseases.

The first and most obvious indication to be fulfilled in the treatment, is the use of such remedies as will directly neutralize the poison in the blood, and thereby obviate most of its effects upon the tissues. Unfortunately we are not acquainted with any such available antidote. Belladonna, which has been much used both as a prophylactic and remedial agent, probably has no other effect than to lessen the susceptibility of the tissues, and to aid in determining to the cutaneous surface. Chlorine and the chlorates undoubtedly possess properties more nearly akin to antidotes or destroyers of these and other animal poisons.

We have used them for several years, in all stages of eruptive fevers, and generally with benefit.

Failing to neutralize the poison, the next object in the treatment is to mitigate its irritative action on the tissues, and to aid its natural tendency to the skin, either for lodgment or expulsion. For this purpose, the union of anodyne and diaphoretic properties are required, with a careful avoidance of all those active evacuents that would divert the circulation, and consequently the poison, to internal structures, and thereby directly counteract the natural tendency to relief. On this account, active cathartics are particularly objectionable in these fevers.

A third object in the treatment is to counteract local internal inflammation, whether in the throat, kidneys, or mucous surfaces; and to sustain, generally, the vital powers of the patient.—*Chicago Medical Examiner.*

Wounds of the Face.

In the course of one of his graphic and instructive letters on the medico-chirurgical events of the Italian campaign of 1859, translated for the *Amer. Med. Monthly*, DR. A. BERTHERAND, of the French army, thus treats of these lesions:

Wounds of the face, generally complicated with fractures of the teeth or jaws, imperatively demand the extraction of splinters of the first and second order—that is to say, those which are loose and those which are still somewhat adherent. To fulfill this indication properly, demands repeated examinations in the sinuses, the fleshy portion of the cheeks, and the nasal fossæ, under *the tongue*, and even into it when it is involved. When bony points protruding into the interior of the mouth, threaten the safety of the tongue, or lead us to fear a subsequent interference with its functions, or deformity, they must be carefully resected. The difficulty is thus greatly simplified, and the duration, so tedious to the patient, of the fetid discharge of wounds bathed in saliva, much abridged. These little operations, after which the wounds in question should usually heal well and rapidly, were often complicated at Castiglione with hæmorrhages from the arterioles lodged in the anfractuosities and canaliculi of the bones of the face. The tampon not proving always successful in checking the flow of blood, we employed the persulphate of iron, which M. Monsell has proposed to substitute for the perchloride ; our experiments are not yet sufficiently conclusive to enable us to pronounce definitely on the relative efficacy of this styptic. I give a few especially remarkable specimens of this kind of lesion.

A., a corporal in the 72d of the line, was struck under the lobe of the left ear by a ball, which, penetrating transversely and horizontally, passed out under the lobe of the right ear. I introduced successively my finger and a female sound along the course of the projectile, and discovered that it had grazed the posterior columns and posterior surface of the velum of the palate and lacerated the tonsils. There was no hæmorrhage nor a single splinter in this wound, which, when we consider the nature of the parts which surround it, was truly extraordinary.

M. M., a captain in the 11th Regiment of Artilery. The ball entered the middle of the lower lip, and passed out behind the mastoid process of the left side. Destruction of the symphysis of the chin ; extraction of a large splinter; hæmorrhage arrested by the persulphate of iron.

C., 1st Zouave, 3d Battalion, 4th Company ; ball passing from the right commissure of the mouth to the middle of the ascending branch of the maxilla of the same side. Extraction of several splinters at the orifices both of entrance and exit. Removal of two teeth left entirely bare.

Captain S., of the Engineers ; a ball entering under the symphysis of the chin, and passing out between the lower lip and the anterior surface of the corresponding incisors. The margin of the bone is cut and broken, without destroying the continuity of the inferior maxilla.

In the case of G., a private of the 34th of the line, the ball, before penetrating the superior maxilla of the left side, between the ala of the nose and the labial commissure, lacerated the cheek in such a manner that the face presents a hideous spectacle. After having washed the wound and removed all the splinters, Principal Medical Director Leuret proceeded to adjust the lacerated strips of flesh by means of interrupted sutures, and succeeded in accomplishing a very useful restoration of the lip and nostril. . . . .

One of the most interesting incised wounds of the campaign is, unquestionably, that of Lieutenant D., of the Mounted Chasseurs, who received a sabre-stroke across the face at Solferino. The entire lobe of the nose, with portions of the cheeks, and a considerable extent of the upper lip, were detached. Being thus turned inside out, they fell, by their own weight, in front of the chin, leaving bare the superior dental arch, the anterior segment of which was separated, with its four incisors, two canines, and one molar. A suture, very dexterously applied by M. N. Perier, Principal Medical Director, so perfectly adjusted the borders of this immense solution of continuity that the external deformity is scarcely noticeable. The loss of a part of the palatine arch, indeed, interferes somewhat with articulation; but this difficulty can easily be remedied by the aid of an artificial obturator.

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Curiosities of Leech Culture.—Many of those who have assiduously cultivated the leech have amassed handsome fortunes, the trade being very remunerative. A prosperous merchant, away in some far district of Poland or Wallachia, will keep some two or three hundred of the inhabitants of his district in full employment collecting for him, paying them on the best of all plans, according to their labor, viz.: so much a dozen, according to the age and quality of the leeches which they bring to the depot. The animals must be all gathered before the heat of the day sets in, and at once carried home to the capacious reservoirs provided for their reception, where they are at once counted and paid for. Packed in clay or in bags, they are at certain seasons dispatched by fleet conveyances to Marseilles, or direct to Paris, change of horses on the way being insured, when necessary, by liberal payments. The mode of packing the leeches for transport is much the same in most of the breeding districts. Some are placed in boxes —first, a layer of moist white clay, then a layer of the little animals, and so on until the chest is full. Some of the merchants pack the leeches in bags as soon as they are taken out of the marshes. Each of these bags contains about sixteen pounds weight, and it is necessary that they should be hung up for a period till the water is all drained out of them, and then the animal rolls itself up into a kind of ball, and lies in a semi-torpid state till it is, perhaps, revived on its journey by a dip into some half-way pond. The boxes or bags containing the leeches are carried in light wagons, divided into necessary compartments. Relays of horses and drivers are always kept in readiness at the various stages of the journey; but notwithstanding the greatest care may be taken in their transport, immense numbers of the animals are killed. Severe frost or great heat is equally fatal to them.—*Once a Week.*

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Variable Effects of Chloroform.—Dr. Bertherand records (*Amer. Med. Monthly*) the following interesting observations upon the variable effects of chloroform under different mental, and, perhaps, also physical conditions of those to whom it was administered for anæsthetic purposes:

"We must not omit to mention here its singularly variable results as regards the promptitude with which insensibility was induced, and the precursory phenomena of *anæsthesia.* While the wounded Austrians dropped, so to speak, asphyxiated, as if struck by lightning, on the first inhalation, the French, laboring under a high state of nervous excitement, entered, as soon as the effects of the chloroform began to be felt, upon a stage of most energetic contraction, extremely difficult to control, and quite impossible entirely to subdue. I was the more struck with this condition from the fact that I had never noticed anything of the kind in my administration of chloroform to the numerous wounded of the different expeditions of Kabylia, in Algeria, or among the Kabylians themselves. I ought to add, too, that privates were especially affected in this way, to the almost total exclusion of the officers." *Dental Cosmos.*

Chloride of Lime Paste.—By L. J. Gildersleeve.—"Chloride of lime is well known as one of the very best remedies for wounds and sores, where there is a want of healthy action or a tendency to gangrene; also for deep burns, etc. It is generally used by mixing with cream or the fixed oils in the proportion of about one to ten of oil; but its volatile nature has prevented its use in any preparation ready to be applied. This difficulty is now obviated in the following preparation:

"Take any of the resins of proper consistence, or rosin and a volatile oil; spts. turpentine or petroleum in such proportion as to make a wax that may be worked with the fingers; mix thoroughly with from five to ten per cent. of chloride of lime, previously moistened by one-third of its weight of water. The whole enters into chemical combination, forming a nice adhesive paste, soothing, stimulating, and affording perfect protection to the parts. It is prepared for the trade under the name of 'Magic Healer.' A preparation in market called 'Rapid Healing Balsam' is made from the same formula."—*Chicago Med. Journ.; Dental Cosmos.*

Obitual Record.

DIED, in Neville, Clermont County, Ohio, December 29th, 1862, Mrs. E. J. B. KINCAID, wife of Dr. W. P. Kincaid.

Dr. Kincaid will receive the sincere sympathies of his many medical friends in this his day of affliction.

Died, on Saturday morning, December 27th, 1862, at the residence of his father, in Brown County, Ohio, of consumption, Dr. ROBERT N. BOYLE, in the 25th year of his age.

Dr. Boyle was a graduate of the Ohio Medical College for the session of 1859, and was appointed one of the resident physicians of the Commercial Hospital; but was obliged to retire from that position before the expiration of his term of service, on account of advancing disease. Dr. Boyle was a worthy gentleman, and had the promise, if life had been spared, of standing well in his profession.

THE

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CONDUCTED BY

E. B. STEVENS, M.D., AND J. A. MURPHY, M.D.

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Original Communications.

ARTICLE I.

Some Therapeutic Effects of Cannabis Indica.

BY T. L. WRIGHT, M.D., BELLEFONTAINE, OHIO.

"The brain and spinal cord are to be regarded as the source of the power of the sympathetic [system] itself, which would, without them, become exhausted."

"The brain and the spinal cord are the main source, whence the power of the organic nerves is gradually renovated."—*Muller*, *Physiology*.

When a new remedy is applied for the cure of diseases in a wide and indiscriminate manner, we may justly suspect some deficiency in the skill of the practitioner. And especially when there is no effort to establish some general principle as to its *modus operandi*, to justify a seemingly universal application of it, we may expect to see a lamentable fatality attending its employment; and a remedy, perhaps of good powers, abandoned at last as pernicious. But sometimes diseases are so closely linked together through certain nervous ramifications, that a specific remedy is found to possess valuable properties for relieving widely seated, and apparently very different maladies.

A short time ago, I wrote for the *Lancet* a brief account of the virtue of Cannabis Indica in relieving vomiting connected with pregnancy. I believe such vomiting to be mainly dependent upon prostration of that portion of the sympathetic system of nerves connected with the stomach. The debility of that part of the sympathetic system appears to us to be due to the overstrained and excited state of that other portion of the same system concerned in the uterine functions during gestation. And the *morning* sickness seems to be especially due to the quiescence of the *stomach* during the night, when all the energies of the sympathetic system are concentrated upon the uterine condition. The attention is directed from the stomach, so to speak. The usual condition of comparative *rest* belonging to the entire nervous system during sleep, is denied to the sympathetic nerves, and a portion of that system is in a continued state of activity at the expense of the vigor of another portion. In this condition I gave the cannabis indica as a direct roborant, not stopping to inquire whether it operated directly upon that system, or acted *indirectly*, by affording increased energy to the great nervous centres.

It is conceded that some of our best astringents have no *sensible* constringing properties, as opium, spirits of turpentine, etc. The question arises, how do they act? There can be no doubt that all such medicines, in their operation as internal remedies, affect the organic nervous sytem in the first place, and that system controls the hæmorrhage or secretion that may be redundant. In many cases opium exhibits more powerful astringent effects than tonics or acetate of lead. Turpentine is superior to ether in special cases, and cannabis indica is better than any of them, in other instances.

Chronic diarrhœa is a disease especially prone to afflict men whose profession or business demands exhaustive intellectual labor. Physicians are peculiarly liable to its assaults after they have passed the meridian of life. Men engaged through life in the ardent pursuit of business, goaded on by a consuming avarice and desire for wealth, lapse into chronic diarrhœa. The brain becomes exhausted, and the sympathetic system is left powerless to control and preserve the structures over which it presides. The same is observed in infants whose nervous centres are exhausted with combined irritation of teething, and of the summer's heat. In all these cases simple constriction will not cure. We must employ such means as will strengthen the central nervous system, and the sympathetic nervous system, or we will fail.

Reasoning as above, it has occurred to me that the chronic diarrhœa of the soldier is more closely associated with mental exhaustion than with change of habits or of diet. The many sources of intense anxiety which affect the American soldier upon taking the field, and while in the service, must be evident. They prostrate his nervous system, and paralyze the source of strength and energy to the sympathetic nerves. Officers and privates suffer from the cause and the disease alike. Viewing camp diarrhœa in this light, I have applied to its cure the cannabis indica upon the principle already announced, strengthening the organic system of nerves. I have not been disappointed. The remedy will not always cure, but it will, I think, always assist in effecting a cure greatly. In some instances, where I have been able merely to hold the disease in *check* or *statu quo*, with quinine, opium, and acetas plumbi, I have effected a cure by changing to two grains of the cannabis indica every four or six hours. Sometimes I combine it with quinine, or opium, or acetas plumbi, or with all of them, or I give it alone. Care should be taken, however, as the cannabis indica is *cumulative* in its effects. On the other hand, I have failed to cure with the Indian hemp when employed first; and other remedies acted better. In such cases I believe the sympathetic system to be in a state of erethism, caused by the irritation of structural lesions, consequent upon a long continuance of the disease. To quiet this erethism the paralyzing effects of opium seem best adapted, in conjunction with other sustaining remedies. Indeed, the Indian hemp appears to me to act best in bad cases where other remedies only partially succeed and the disease refuses to yield. But under any circumstances I have never known the remedy in discussion to fail greatly to ameliorate the condition of the patient. Let it be remembered that opium and cannabis indica can not be substituted for each other, but they may be advantageously combined. Opium paralyzes the nervous system, and only strengthens it, if at all, by giving it *rest.* Cannabis indica does not paralyze the nerves, but strengthens them directly. It does not *constipate* by paralysis—it *cures* by beneficent virtues.

If I succeed in directing attention to the properties of cannabis indica in strengthening the sympathetic system of nerves, and as valuable, therefore, in the cure of a wide range of diseases, I will have secured my object in writing this communication.

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ARTICLE II.

A Case of (Splenic) Leukæmia.

[A Paper read before the Cincinnati Academy of Medicine.]

BY D. S. GANS, M.D., CINCINNATI, OHIO.

About the beginning of August last, a gentleman whose family I have attended for several years, called on me, accompanied by his little son, aged seven years, a lively and fine, healthy boy formerly, and who had never passed through any severe sickness except a very mild form of scarlet fever, three years ago. His mother had died of a disease of the heart. The father stated that the boy had of late become pale and weak; considerable lassitude and diminished appetite, *and at times palpitation* of the heart. Having walked a considerable distance to my office, I told the gentleman to take the boy home, and I would call at his house next day for the purpose of making a thorough examination. On doing so, with the stethoscope and otherwise, I did not discover any organic disease of the heart or of any other organ. There was increased action of the heart,—palpitation, but not excessive; pulse soft, naturally full, 100–110 per minute; great paleness of the face, tongue clean, appetite bad, bowels regular; kidneys acted well. The family stated that in fact he had shown some lassitude and paleness since winter; but not being associated with any other marked phenomena, they did not pay any attention to it until now, when the increasing debility and striking paleness caused them some uneasiness. To me it appeared very serious, from the fact that the mother had died of a cardiac disease, and some other members of her family (a brother and sister) suffered more or less of it; and the palpitation, etc., as almost the only positive symptom, pointed to a disturbance of that organ. I prescribed a mild antiphlogistic medicine, rest and mild nourishment.

All the symptoms increased; at night great excitement in the circulation, great heat, increased palpitation, etc.

On making another auscultation of the chest, a few days later, I discovered, above the left clavicle, a murmur like the rushing of water (anæmic murmur), but the heart itself perfectly free. I ordered the tincture of veratrum viride, three or four drops three times a day, to control the action of the heart. After continuing it for three or four days the pulse became quieter, and I ordered three or four drops at night, to subdue the great paroxysmal orgasm each night; and it did so each time. I now commenced giving the citrate of iron and quinine, continuing with it without any other medication except the nightly dose of veratrum.

After eight or ten days of this treatment, and the symptoms still increasing, Dr. Murphy was called in consultation about the end of the month. A thorough examination of the whole body was made by him, without discovering any lesion or alteration of any organs; the anæmic murmur above the left clavicle stronger. There was no tension, no tumefaction of the abdomen, no œdema whatever, no sign of disease of the kidney. A few days before this consultation I received the result of the analysis of the urine, which I had ordered, and it showed *no albumen*, but a considerable quantity of sugar. During the whole sickness the urine was of normal quantity. The same medicine was continued.

At this time he had strength enough to walk from one room to the other, but he soon became so debilitated and emaciated that he could not leave his bed, and ultimately could not sit erect or move his head. He complained of some light pain along the left side of the chest. During this period he brought up twice a small quantity of blood from the lungs; and occasionally a few drops from the nose by picking at it with the finger, which he was in the habit of doing. The blood from the nose hardly showed any color on the handkerchief, only of the lightest pink. His whole appearance was now extremely blanched; a fœtid odor from the mouth like salivation odor; no appetite whatever, but great desire for acidulous substances, in which he was measurably indulged; hardly any sleep; great sensibility towards the light; tongue perfectly clean.

About the 10th of September he showed some improvement, became somewhat more lively, and commenced moving in bed again, having lain the last eight days completely prostrated. Begins to sleep more at night, pulse more quiet and regular.

September 14th.—Lips begin to show color again, and he gained general strength very rapidly. The anæmic bruit grew less and less, disappearing entirely, appetite good, etc.; so that about the first days of October he was able to walk out again, complaining of nothing, getting stout almost to obesity. I ordered the iron and quinine to be continued two weeks longer.

About the first of December, the same symptoms, except the anæmic bruit, returned with rapid progress; bowels regular; urine of a dirt-white or milky appearance, and the analysis showed no albumen, but an excessive quantity of bi-urate of soda. He was put on the same plan of treatment, wine and generous diet.

He became reduced very fast, and on the 7th of December I found the spleen much enlarged, not very painful; abdomen very tense, tympanitic. Volatile liniment, with iodine and extract of belladonna, as frotation in the region of the spleen. Bleeding from gums continues. ℞. Muriated tincture of iron alternately with the quinine and iron by hydrogen.

October 11th.—Abdomen soft, spleen smaller to the touch, somewhat more lively; still profuse bleeding from the gums. Applied the tincture of iron locally with good result. Some of the cervical glands enlarged.

October 13th.—Abdomen very full and tense, the spleen reaching down into the left iliac region.

October 15th.—Greater prostration; bleeding from the gums almost stopped. There are on the lips *dark brown* spots, like dry gangrene.

October 17th.—Great exhaustion; about 6 o'clock P. M., cold extremities, pulse filiform. After giving him a considerable quantity of old cherry wine, pulse rose and warmth returned. Urine still of the same milky appearance.

He died on the 19th, the intelligence remaining perfectly clear to the last.

Remarks.—It is to be deplored that a post-mortem examination was not permitted to be made, for it is very seldom that a case presents itself in our practice of such great physiological and pathological interest as this case just now reported,—especially in reference to the sanguification and the pathological importance of the spleen. Neither do cases of leukæmia or leucocythemia, as Bennet calls it,—and I take the case in question to be that disease—occur often, nor have yet been reported in sufficient number as to settle the points at issue between the different pathologists who have written on the subject. The total absence of purulent deposits or pus formation on the surface of the body, or in the inner organs, as far as we are justified to judge by the existing symptoms, seems to speak against the view held by Bennet, Rokitansky and others, namely, that the white-grayish appearance of the blood, the white corpuscules found therein, are pus corpuscules—with other words, that leukæmia consisted in a pyæmic dyscrasia; but the history of this case goes to prove the correctness of the opinion of Virchow, that leukæmia consists in a superabundance of colorless blood corpuscules; but not like that existing in pregnant women, or in some pathological conditions, as in inflammation, but that they, by the morbid conditions of certain organs—the lymphatic glands and the spleen,—are not transformed into red corpuscules. Danné was, if I mistake not, the first who ascribed to the latter organ a peculiar influence upon the metamorphosis of the colorless corpuscules into red ones. This case seems to verify this doctrine; for, although the affection of the spleen did not present itself to our observation from the beginning, it is to be presumed that the function of that organ was altered long before the patient came under our treatment, for the symptoms which indicated a want of red corpuscules commenced, as stated, six months before the attention of the family was drawn to it; and the family have told me since, that really he lost his color, to a certain degree, two years previously. Neither in this case did any of the conditions prevail beforehand in which an increase of colorless blood corpuscules are found, as great loss of blood, chronic debilitating diseases, or severe acute ones, like pneumonia, etc. Nor were the hygienic conditions surrounding the boy such as to bring about an impoverished state of the blood. The fact that the enlargement of the spleen showed itself at so late a date does not contradict the opinion that the leukæmia depended upon a morbid condition of the spleen. Virchow states distinctly that in some cases the chlorotic condition precedes the tumefaction of the spleen ; in others, this forms the first symptom.

Is it not likely that those indistinct pains of the left side, of which he complained before the enlargement of the spleen was observed, proceeded from some disturbance in that organ ? The case had all the characteristic symptoms present in those reported by Virchow, Bennet, David Craigie and John Fuller, and which prompted the first two to apply that term to them ; but it is to be observed that they were not accompanied by any other morbid phenomena, no diarrhœa, no vomiting, no tumefaction of the liver, etc., as reported in some ; and instead of the hæmorrhage from the nose, a considerable one from the gums. The fœtid odor from the mouth is peculiar to my case, as it was not present in any of the cases reported by others.

To enter more fully into the question in its various bearings would pass the limits of a simple report, and belongs rather to the discussion upon it. The principal questions which naturally arise, are : Can the blood become changed in its morphological composition ? Can a dyscrasia of the same, like the one in question, take place independent of a morbid condition of some organ or organs, which influence the process of sanguification ?

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ARTICLE III.

Case of Puerperal Convulsions.

BY WM. F. HARVEY, M.D., PLAINFIELD, IND.

Harriet T., æt. about 25, of sanguineo-nervous temperament, *enciente* the second time, near the termination of the eighth month of her pregnancy, called during the night of the 30th of November, 1862, upon my friend, Dr. A. V. Coffin, for relief from neuralgia of the left eye, and left side of her forehead. The symptoms were those of purely neuralgia. The Doctor gave her a portion of acetate of morphia, and watched her awhile. He suspected that it was possible something else might be the matter, because he had been called upon nearly every week for several weeks previous to this to bleed her for headache; and because near the termination of her first pregnancy she had seven eclamptic spasms.

Finding the first portion of morphia did not relieve her, he was revolving in his mind the propriety of giving her more, when his attention was called to her by some of the family, and by the time he reached her bedside, she had fully developed a spasm of the clonic character. He immediately corded an arm and bled her to the amount of about three pints, and so soon as she could swallow, gave her a portion more of morphine—about a grain. It was not long, however, before a second convulsion supervened. He then posted a messenger for me, as I was in the neighborhood at the time. Before I arrived she had a third convulsion, and immediately after my arrival a fourth. So soon as we could, after the fourth convulsion, we began to give her chloroform by inhalation, and more morphine in grain doses. By this means the spasms were arrested for six hours, when they recurred. Dr. Coffin was then summoned to attend upon another case, (supposed to be colic, but which proved to be another case of threatened puerperal convulsions,) and left me to wait on the case until he should return; both of us supposing that large doses of morphine and the chloroform would certainly arrest the convulsions again. We were both mistaken in our supposition, for they came on at intervals varying from about twenty minutes to three-quarters of an hour. During partial consciousness, she would occasionally strain as if in labor; but the signs of labor were absent so far as the exterior of the abdomen indicated—not the least motion of the uterus could be felt, and there was no flattening above the umbilical region. We had not yet made vaginal examination to ascertain what was going on there. My attention at this time was mainly directed to the remedies, to see that she should get enough of them to stop the return of the spasm, if possible. But finding I was not likely to succeed in this, I posted a messenger after Dr. Coffin, to come again and assist me in delivering her. Soon after the messenger started one of the women told me *she had certainly passed the waters, for she heard them passing.* I immediately made the examination *per vaginam,* supposing that I should be able to relieve her directly; but, to my surprise, I found the os uteri intact, with its occluding plug undisturbed, and not any uterine contractions taking place at all. She had passed urine, which had the odor of strong acetic acid.

Between each two convulsive attacks I gave her a grain of acetate of morphia, and administered the chloroform until I had given her between three and four ounces of chloroform, when I was obliged to leave it off, because it made her so restless that it was difficult to keep her on the bed so soon as she began to recover from the shock of the convulsions. She took in all about ten grains of morphine, and had seventeen clonic spasms, when she fell into a deep stupor, with a stertorous breathing that was horrible to listen to. Yet what could we do? We each made frequent examinations *per vaginam*, to ascertain whether there was any chance to deliver her, and as often found the os uteri completely closed.

The last convulsion she had was between 3 and 4 o'clock in the morning. Her pulse remained tolerably good all the time, except when the spasm was on her. At 8 o'clock I was obliged to leave, expecting that after a time she would have a recurrence of convulsions, and die in one of them, undelivered. About 10 o'clock Dr. Coffin made a vaginal examination again, and found the plug had passed from the mouth of the uterus; yet there was no uterine contraction and no dilatation of the os; but after considerable effort he succeeded in dilating it sufficiently to introduce his curved scissors (having nothing better at hand) into the uterine cavity, with which he burst the membranes and let off the amniotic liquor. The head of the fœtus came down to the neck of the uterus as the waters flowed off. After considerable effort he succeeded in introducing one finger into the uterus, then two, then three; then he concluded to try to introduce his hand and turn, when complete relaxation took place and he slipped his hand along the side of the fœtal head to the outer corner of the eye, and at that time a very moderate contraction of the uterus took place, which brought the head down so that he got his fingers under the chin and held on; after a time another contraction followed, which he aided by traction. In that manner he effected delivery.

Immediately after the delivery the pulse began to sink, and the cheeks, which before were blanched, became flushed. He gave her a small quantity of wine, which after a while she swallowed. This he frequently repeated, until she showed signs of returning consciousness. From this time on she gradually revived without any more spasms.

Remarks.—This case was bled only to the amount of three pints at the first; but she took an amount of morphine within twenty-four hours equal to sixty grains of opium, and chloroform between three and four ounces, before the convulsions ceased to return. Delivery was effected by actually producing dilation of the os by the finger after the waters were drawn off. After this she recovered from a perfectly comatose sleep and stertorous breathing. The blood drawn from the arm separated into a very small clot, of not more than one half or two-thirds of a pint, and the remainder a very murky serum. I do not remember to have seen the quantity of serum so enormously large, in proportion to the crassamentum, before this. The urine and sweat had a strong acetic acid odor. The clonic condition continued for from three to ten minutes. Some of the spasms began in the left arm and gradually extended down the left side, then became general over the whole body; but when they came in this way she did not cease to breathe as she did when they came on suddenly and began in the head. The child was dead, and the placenta followed at its heels. There was but very little hæmorrhage, but a transparent fluid followed by spurts for a considerable time after the placenta had been delivered.

In the *Lancet and Observer* for December, 1862, Dr. Stevens reports some cases of puerperal eclampsia, and in the discussion which followed, Dr. Mendenhall said "*all* the cases which he had seen coming on before dilatation of the os, *died.*" And Dr. Woodward said "patients usually got well in the earlier months of pregnancy, but not from the seventh month and afterwards."

In our case the pregnancy had progressed to the end of the eighth month, and after seventeen convulsions got well. The spasms also came on before dilatation, and it is probable that dilatation would not have come on had not the waters been let off. This woman had a robust constitution, and up to the night in which she was taken, had done most of her housework; and the evening before she was taken she ate a very full meal, and seemed unusually lively and well. Some of the convulsions were of the apoplectic character.

This is a case in which large and repeated bleeding might have benefitted; but we had been relying upon the reputed effectiveness of opiates and chloroform so long, that we were fearful that if we bled largely at a late hour there would be absorption of morphia so rapidly as to destroy life by narcotism. Was there any danger of that?

I am inclined to think that if we are to derive benefit from the use of chloroform, it will be very early after the first symptoms of the disease are manifested. I think at that time it would be advantageous in restoring the blood to its wonted, healthy state. In this case there was rapid disorganization of the blood; for not a week previous to the attack the relative proportions of serum and clot were not much different from the healthy state. Yet at that time the red corpuscules were unusually frail in their texture—easily broken up.

In the blood last drawn there seemed to be a layer (so to speak) of the coloring matter of the blood on top of the clot and at the bottom of the serum. It appeared to have been precipitated from the serum.

This case is one which shows how much opium the human system will tolerate under such circumstances, without producing fatal coma or narcotism.

ART. IV.

Erysipelas.

BY ALEX. MCBRIDE, M.D., SURGEON IN CHARGE AT CAMP WALLACE.

I am at the present time in charge of the hospitals of the paroled forces at Camp Wallace, a healthy locality about four miles north of Columbus. The diseases prevalent are such as any one acquainted with army practice would expect to meet with at this time of year among soldiers who have suffered from hardships, privation and great irregularities of food and every other comfort: the various forms of continued fever, among which pneumonia and erysipelas figure prominently at this time. It is of the latter that I design at this time to speak of chiefly.

The erysipelas prevalent here is very clearly contagious and idiopathic. Cases are brought in with the eruption on the face. Other cases have arisen after two weeks' confinement with pneumonia, in a ward where there had been no erysipelas; but in the ward at present devoted to that disease alone, nearly every nurse was taken down with the disease. There were several cases in this ward when I took charge, about one month ago. I found that nearly every patient, on recovery from measles or other disease, took the erysipelas; so I stopped receiving into the ward any patients except those having that disease developed.

The disease did not originate with wounds. There has been no case of traumatic erysipelas. It does not seem partial to wounds. One of the nurses, a stout man about forty, had the misfortune to get his face somewhat pounded on Christmas while pretty thoroughly intoxicated, and four days afterward, the erysipelas appeared on the ridge of his nose, the situation where it first attacks nearly every case. This part of his face was neither wounded nor bruised, and when the eruption had spread entirely over his face and scalp, it manifested no special action about the small wounds. The eyelids swelled largely, as they did in nearly every case. I conclude that the debilitating effects of thorough intoxication rendered his system sooner vulnerable. As might be supposed, those persons who contract this disease primarily, without the debilitating effects of other diseases, have it most lightly, and recover soonest.

In nearly every case it begins on the ridge of the nose, extends across the cheeks, upon the forehead, about the mouth and chin, then over the entire scalp and ears. The upper lids swell enormously, and in some cases require the lancet for the evacuation of pus after the inflammation has abated. Most cases become delirious about the second or third day. All have recovered except two, who had been previously reduced by diarrhœa or other disease.

Treatment.—Much might be written about treatment, but much is not necessary. Whoever has well established and good principles for the treatment of idiopathic continued fever, will be competent to treat this disease; and in saying this I do not wish it understood that I would confine the physician to any favorite mode of mine. I know of no local treatment that is *especially* beneficial. Smearing with lard oil or glycerine relieves the pain and smarting ; lead lotions or water dressings relieve the heat, and perhaps reduce the swelling slightly ; tinct. iodine, tinct. ferri chloridi, caustic pencil or solution,—all these blacken and cover up the inflamed surface, but do not cure it.

Chloride of iron is not a specific, as some seem to suppose, neither is it beneficial in *every* case ; but it is a very good medicine in many cases,—cases in which the pulse is very soft, in about such cases as those in which quinine, opium and the like are beneficial. In cases that are somewhat plethoric, with strong pulse, I order a cathartic thus :

℞ Magnesiæ sulphas, ℥ ss.
Bitart. potass., ʒ j. vel ℈ ij.
Nitrous ether, flʒ j.
Aqua pura, fl℥ iij.
M. To be taken at once.

In cases that are more atonic, with considerable swelling and not much redness, or a dark red, I order thus :

℞ Magnesiæ sulphas, ℥ ss.
Bitart. potas., ʒ j.
Nitrous ether, flʒ j.
Tinct. cantharides, ♏. xl. to flʒ j.
Aqua pura, flʒ iij.
M. To be taken at once.

Many cases require no cathartic, such as those who have just got over measles, or pneumonia, or who have a diarrhœa. Such cases require opium, quinine or iron ; or, in short, whatever is indicated by the topical or the sthenic or asthenic condition of the particular case.

Egg-nog, milk-punch, whisky diluted with water and sweetened or otherwise to suit the taste, are important means of sustenance, and are much better than broth and the like. All these I give in almost any quantity, according to the patient's preference. But the article of which I wish to make particular mention is cider,—good, sound cider. There was published in the July number of the *Lancet* a paper which I addressed to the Sanitary Commission on "Vinegar as an Antiscorbutic." All I said then I adhere to, and take this occasion to urge upon the notice of the medical branch of the army. I do not urge that erysipelas and continued fevers generally are scorbutic diseases, but I do find that they all crave such foods and drinks as those who are decidedly scorbutic. I have given my erysipelatous patients recently cider as often as they would drink it, and they will use up a quantity in a day that would surprise some brethren. I may say here that I give the same to the pneumonia and continued fever patients generally, and with a very happy effect in all. To those who administer mercury in this class of diseases I recommend that they omit the cider, for the malic and acetic acids which it contains would be liable to cause a more mischievous action of the mercury. I know from experience that the Army-Surgeon in the field can not generally procure cider nor sour wine in sufficient quantity, but they always have vinegar, whisky and sugar, and with a judicious use of these nearly the same effect can be produced.

As I am not now writing only for the benefit of the medical profession, I trust I will be pardoned for introducing the following, which is not strictly medical.

I have known some respectable surgeons who prohibited the sale of cider, sour fruits and vegetables in their camps; and this when the soldiers had lived for weeks or months on dry and salt rations. I have known some prohibit, or urge the non-use of vinegar. What shall I, what ought I to say to this? Is the healing art, the noblest of all, the only one of all arts which shall have no philosophical or practical basis?

Drs. Mendenhall, Wood, Norton and others, no doubt remember those poor sick and wounded soldiers on the steamer Tycoon on her first trip from Shiloh. They will bear witness that vinegar and water was the principal drink as well as medicine used on the boat, and how grateful and reviving it was to the sick, wounded and all. Some of those gentlemen remarked that the simple vinegar and water cured the thirst better than lemonade. The Catawba wine also did most excellent service while it lasted. Most of those men were wounded, but they all had been exposed to the severest kind of hardship and exposure, and privation of vegetable and acid food.

On the same boat in May, with another load of sick and wounded soldiers from Shiloh and vicinity, when most of the patients had diarrhœa and fever, under charge of Dr. Smith, the present Surgeon-General of Ohio, I, with the other medical gentlemen on board, observed the same grateful effects of vegetable acid. Some of the gentlemen on board considered mercury as necessary to remove the yellow tinge with which many were affected, but no results on the boat proved their correctness.

But one fact is highly worthy of mention. There were taken on that boat over fifty patients of the —th Ohio Regiment, who were more scorbutic and ecteric than the rest. In that regiment blue mass and hydrargyrate were the daily medicines; they were the alpha and omega. This I found out by careful research. These patients were strikingly worse conditioned than the average lot.

While I was in charge of General Hospital at Camp Chase, in August, September and October, many of this same lot of men again fell into my hands, as they had about this time got well enough to report to the hospital. The debility still continued in nearly all, and many of them were discharged unfit for service.

ARTICLE V.

Case of Croup following Diphtheria: Tracheotomy—Successful Termination.

BY WM. H. SHERWOOD, M.D., UNIONVILLE, OHIO.

Edwin P., aged 9 years, of good constitution, was the subject of croup, following a mild form of diphtheria.

Sept. 19th.—I was called to see him, found him complaining of pain and soreness in the larynx, with decidedly a croupy cough, unable to speak above a whisper, and breathing somewhat stertorous. Notwithstanding the usual remedies for croup were administered sedulously, there was no permanent benefit. The little patient's sufferings passed on from bad to worse. I explained to his parents the danger of his situation, and proposed to them the operation of tracheotomy, if there was no improvement by 3 o'clock P. M. They gave their consent at 3 o'clock. I visited him in connection with Dr. M. P. Sherwood. We found him laboring under severe dyspnœa, pulse slow and regular, countenance anxious, with but slight discoloration of the skin, from imperfect hæmatosis. We made every preparation for an operation without letting him know what was to be done, and then administered chloroform very cautiously, calculating to desist if it added to the dyspnœa ; but, as it did not, we continued it until he was sufficiently under its influence. We then removed him on to a table, and proceeded to operate, selecting the space between the cricoid cartilage and the isthmus of the thyroid gland, carrying an incision from the middle of the thyroid cartilage to an half inch below the cricoid, dissecting cautiously down to the trachea, and by drawing down the isthmus with a blunt hook, found space enough after piercing the trachea with a straight bistoury, and removing a circular piece, to introduce a large-sized, double silver trachea tube.

After he had recovered from the effect of chloroform, he expressed himself as better. This was September 23d. He had a comfortable night of it, sleeping well, taking nourishment, breathing perfectly good and pulse regular.

Sept. 24th.—Much the same, breathing regular, expectorated a good deal of tenacious mucus through the tube, pulse a little accelerated.

Sept. 25th.—Came after me early in the morning, said he was dying. When I got there I found him considerably exhausted from a severe spell of coughing and strangling, but at the time breathing quietly. He had succeeded in expectorating a considerable quantity of thick gluey mucus, which had closed up the end of the tube in such a way that removing the inside tube did not relieve the obstruction. He remained comfortable through the day and night, expectorating less.

Sept. 26th.—Found him somewhat feverish, tongue a little furred, pulse more frequent, cough tight, bowels had moved. I removed the tube and gave a weak solution of antimony once in three hours. In the evening he was more comfortable, expectorated easy through the day, pulse slow, tongue clean, breathing natural.

Sept. 27th.—Skin cool, pulse feeble, inspiration labored, from contraction of the opening in the trachea. Ordered one grain of quinine once in four hours, replaced the tube, and directed them to give nourishment freely.

Sept. 28th.—Breathing good, pulse slow, tongue clean ; continued to take nourishment.

Sept. 29th.—Expectorated less, much the same ; directed them to omit the tonic.

Sept. 30th.—He is comfortable, has expectorated through the tube a large quantity of false membrane, and now, for the first time, the obstruction in the larynx appeared to give way, for when he swallowed fluids, a small quantity would trickle down and come out of the tube.

Oct. 1st.—I removed the tube. This condition of things continued until the 10th, gradually diminishing as the opening in the trachea closed.

Oct. 15th.—The wound in the skin has healed, his articulation is good, and he has entirely recovered.

Editorial Translations.

Sudden Deaths consecutive to Hydrothorax.

At the November meeting of the Medical Society of the Hospitals of Paris, M. Laseque related to the Society the history of a case which had made a marked impression on him; it was a case of sudden death consecutive to a latent hydrothorax, supervening in a young foreign physician of twenty-three or twenty-four years of age. This young man, of a nervous temperament, had, some three years since, submitted himself to a hydrotherapeutic treatment, since which time he had complained of pains in the sixth intercostal space, which returned in paroxysms of two or three hours, especially in the night, which he attributed to an intercostal neuralgia, of a rheumatic character. He had consulted at several different times, for this pretended neuralgia, several hospital physicians, who, taking his history without doubt, and without a thorough examination, had advised some topical treatment, which proved inefficacious. He had taken a trip to Italy, from which he felt better; finally, returning to Paris very recently, he complained of weakness and general bad feelings, when one day, after a short ride in a carriage, and a short walk, he was seized, at the house of a friend, with a prolonged attack of syncope.

It was during this attack that M. Laseque was called, when he found him pale, the extremities cold, the pulse without reaction; believing, however, that such a syncope did not occur without cause, but fearing to fatigue the patient in so grave a state of feebleness, M. Laseque contented himself with prescribing some gentle stimulants, which somewhat revived him. In the evening his appetite returned. The next day, M. Laseque saw him on his bed, spoke with him, but finding him feeble, he postponed a thorough examination. The next day he found the patient sitting up, and he had passed the morning sitting up and had taken his breakfast with a good appetite. He replied readily to questions, and related his entire history. M. Laseque then examined the heart, and observed immediately that this organ was pushed to the right side of the sternum, and observed an absolute dullness in almost the whole of the left side of the thorax, absence of respiratory murmur, the bruit—in fine, all the signs of a considerable effusion in the left pleura. This examination barely lasted a few minutes, when the patient laid down, then became pale, and groaning once, died; death occurred instantaneously, while M. Laseque held his hand. From this unhappy case, adds M. Laseque, we may learn two valuable lessons: the first is, that in treating a physician, we must not rely on the statements or history of his case as given by himself; the second one is, that there may exist a latent hydrothorax to a considerable extent, which is unaccompanied by cough or by any marked symptom of the disease, which permits the patient to walk about, to attend to his business, even to travel, to ascend mountains, as this patient did, and which are, however, a possible cause of sudden death.

M. Chauffard said: Such cases are seen very often with soldiers; has seen them especially at Avignon, among the conscripts; going out very early in the morning to exercise, they would return suffering with an obscure pain, of which they did not complain for twelve or fifteen days, but in so vague a manner, that the surgeon of the regiment, neglecting to examine by auscultation and percussion, did not at first send them to the hospital. M. Chauffard has thus seen pleurisies dating back for three months, filling the whole of one side of the thorax, but not manifesting itself either by cough or local pains, nor by excitation, and permitting the patient to perform his duties without any other thing being observed than a little pallor, the veritable cause of which is only revealed by physical examination.

M. Guerard: The fact of the possibility of sudden death, in pleurisy, is known, but we may ask, to what degree is it in connection with the abundance of the effusion? He has seen in his own ward, at Hôtel Dieu, a convalescent die of pleurisy at the time when he auscultated, before signing her discharge, which she herself demanded. The autopsy did not reveal any lesion of the pleuræ, of the lungs and heart, which could explain the death. The pulmonary had been examined also, but the investigation of this point was pushed less far than it would be at the present time, since the theory of emboli is the order of the day.

M. Barth said, that he had seen a lady, forty-five years old, suffering with encephaloid cancer of the breast, die suddenly from a pleural effusion, which appeared during the treatment of the cancer. We might, perhaps, attribute it to the cancerous diathesis, for we know that this fearful disease may produce, among other accidents, vascular obliterations. As to latent hydrothorax, he has seen a young physician, who had a considerable effusion for a long time without having any knowledge of it.

M. Bouchut said, that he had seen two cases of sudden death, with effusion in the left pleura, when the operation of *paracentesis thoracis* was about to be performed.

M. Montard-Martin insisted on the fact, that all the cases which had been related were those dependent on pleurisies of the left side; the effusion in this side of the chest is much more grave, from the displacement of the heart, and on this account, *paracentesis* should not be deferred. As to the case of M. Guerard, where there was no effusion, it seemed to him that there was no reason to connect with those just related, any more than with that, all the sudden deaths which have been observed in the convalescence from other diseases.

M. Thirial mentioned the fact, that a long discussion on the same subject was held in the Society seven or eight years ago, and that we may recur to the publications of those discussions. He has seen two cases of sudden death with pleural effusion, one when cups were being applied to the patient, the other just when the patient was finishing shaving. The symptoms and pathological conditions are always the same: considerable effusion in the left side, without well-marked symptoms, mortal syncope from the most insignificant movement.

M. Hervieux said, that he had seen a case. He insisted on the part that hydrotherapia has seemed to play, in the case of M. Laseque, in the production of the effusion. He has seen this medication produce pleurisies mistaken for some time.

M. Barthez said, that from this discussion we learn that almost everybody has seen cases analogous to the one of M. Laseque. As to the remark of M. Montard-Martin, on the particular influence of pleurisy of the left side, M. Barthez has seen death supervene twice from hydrothorax of the right side. As to hydrotherapia, it may produce accidents, like any other medication, when it is misapplied.

M. Laseque insisted on the abuses which result from hydrotherapia, especially by unprofessional people at their own homes.

M. Bouchut said, in connection with considerable effusions, which indicate an operation, that twice this operation has been practised by him with all the requisite precautions, but was not followed by the flow of any fluid. He was assured that the canula was not arrested by any false membrane, or by a pleural fold. He explains this exceptional fact to the possibility of making gelatinous fluid already coagulated in the pleura; this would be but one degree more than we daily see when the fluid drawn off by puncture coagulates.

M. Beau said, that he had experienced the same disappointment in some operations for thoracentesis, and is disposed to admit also this explanation, but no autopsy has yet revealed to us the real cause.

Proceedings of Societies.

Proceedings of the Cincinnati Academy of Medicine.

Reported by W. T. Brown, M.D., Secretary.

Puerperal Convulsions.

Hall of Academy of Medicine, Dec. 29, 1862.

The following is the concluding part of a report upon the present state of obstetrical science, read before the Academy of Medicine, by J. H. Tate, M.D.

"A subject of highly practical importance to the obstetrician is the nature and treatment of puerperal convulsions. The old writers before the time of Leake seem generally to have regarded them as simply a variety of spasmodic disease, due to a general irritability of the system arising with pregnancy; and, therefore, resorted to anti-spasmodics, and chiefly to opium, in its treatment. Their ill success was exhibited in the loss of nearly all their patients. Others have supposed these convulsions were occasioned by an excitability of the uterus due to its over distension; hence their chief indication was to empty that viscus as soon as possible. A much larger proportion, however, of the profession have taken the view that eclampsia was the result of a state of general plethora, and with them the lancet was the chief instrument in effecting a cure.

"Dewees, Churchill, and many other reputable authors, divide puerperal convulsions into two varieties, the apoplectic and epileptic. Tyler Smith and Bedford treat of eclampsia as arising from centric or excentric causes; while they treat of, separately, those puerperal convulsions which are dependent upon uræmia. There is, however, in all or nearly all of these cases a changed condition of the blood, which at once destroys all essential similarity between them and simple cases of either epilepsy or apoplexy, and to perpetuate such a division is, therefore, calculated only to confuse and mislead. The divisions made by Smith and Bedford *are scarcely less* defensible, unless it can be shown that convulsions arise in puerperal women just as they do in children, from mere excentric stimulus of the stomach or other organ, entirely irrespective of any previous changes effected in the blood. Now we think the whole course of recent observation has gone to show that there are no such cases; or, at least, that things are altogether exceptional to the general rule.

"Before entering upon a discussion of the treatment of this alarming disease, there are some general facts in regard to it now well ascertained which we think may well occupy our attention, and which, perhaps, may assist us in arriving at more satisfactory conclusions.

"The first of these is, that in more than ninety per cent. of cases, this disease occurs in primapara; in women not broken down by child-bearing, or by any form of cachexia; in fact, the digestive organs are usually unimpaired, and the appetite good up to the time of convulsive seizure, nor is there any diarrhœa, or excessive sweating, to reduce the system or impoverish the blood. The urinary secretion is diminished.

"The second general fact is, that the disease is almost invariably preceded and attended by albuminuria. Dr. Lever, of Guy's Hospital, says that he had for some years examined the urine of all cases of puerperal convulsions coming under his observation, both in private and hospital practice, and in every case but one it was found albuminuric. Cazeau tells us that in his experience, nineteen out of twenty were albuminuric. Gourbeyre, in his prize essay, says, that in one hundred and sixty-four cases of albuminuria in pregnancy (by various authors whose names he cites) there were ninety-four cases of albuminuria accompanied with eclampsia; sixty-five cases of albuminuria without any eclampsic attack; and only five cases of eclampsia in women whose urine contained no albumen. These facts prove conclusively that nearly all cases of eclampsia are attended by albuminuria; and this being so, *now* since attention has been directed to the urine, the conclusion is irresistible that it always has been so; and that this was the form of eclampsia which was treated by Leake, Dewees, Meigs and Ramsbotham.

"The third general fact is, that eclampsia is very commonly preceded and attended by œdema of the legs, hands, and often of the face. So generally is this the case, that all recent obstetrical writers draw attention to it as one of the important precursors of that affection, and urge it as an important duty to begin at once our treatment whenever it shows itself in a case of pregnancy. There is, evidently, a close relation existing between this condition and the eclampsic; for in the morbus Brightam, and in that state of the kidney which follows scarlatina, we find œdema and albuminuria and convulsions existing together. This condition is very different from anæmia, and is no doubt merely one of the results of a failure on the part of the kidneys to carry off the usual amount of water from the blood.

"The fourth general fact is, that hundreds of these cases in the worst forms have been treated successfully by blood-letting and purgation. Not only so, but in many instances where all the symptoms were present which indicate that eclampsia was about to supervene, the use of the lancet has dispersed them, and no convulsions have occurred. Still further, in some of those examples, when such a singular predisposition exists to this form of disease, as that the woman has again and again in successive pregnancies been the subject of convulsions, and has been successfully treated by venesection, she has in a last pregnancy, when blood-letting was not employed, lost her life. Cases of this kind are related by Dewees and Meigs; and our worthy neighbor, Dr. Mount, who told us that he had treated twenty-five cases of convulsions by the lancet without losing any, has since narrated to me that one of his patients in a subsequent pregnancy fell into convulsions and was treated without bloodletting, and died.

"The fifth general fact is, that recently quite a number of these cases have been treated successfully with chloroform, the convulsions apparently being again and again arrested after its inhalation. Some have supposed that this medicine acted curatively by stopping the fermenting process by which urea is converted in carbonate of ammonia; but we are more inclined to suppose that its effect is to be attributed to its power of diminishing reflex sensibility. Chloroform has generally been used after one bloodletting, but in some instances has been used alone with success.

"The sixth general fact is, that in some cases the rapid termination of a labor, either by natural or artificial means, has seemed to be followed by relief, and an early cessation of the convulsions. In perhaps a greater number of cases no such happy result has followed the emptying of the uterus. We know, moreover, that many cases of eclampsia do not come on until after the labor has terminated.

"The revelations of post-mortem examinations have not thrown a very satisfactory light upon the nature of this disease. In some cases effusions of blood, in others of serum, have been found in the cerebro-spinal axis, while in others these parts have been found deeply congested. In most examinations, neither of these conditions have been found. This, however, is likewise true in persons who have died of apoplexy; so that such eminent writers as Abercrombie, Burrows, and Solly, now hold that apoplexy may arise from an effusion of serum or blood into the brain; or from an active congestion, which may pass off *in articulo mortis*, and leave no traces behind.

"The autopsies of women who have died during gestation and labor have shown that either of these conditions is usually accompanied by a passive engorgement of the medulla spinalis, showing in both of these states a predisposition to congestion of the cord, and consequently to convulsions. Moreover, the cephalalgia, the blindness often continuing for days, the sudden coma, the state of the pulse, the convulsions, all would lead us to suppose that the cerebro-spinal axis is at the time of the paroxysm laboring under congestion. The predisposing cause of this is no doubt that toxæmia or poisoned state of the blood, which is induced by the failure on the part of the kidneys to perform properly its depurative functions. When this condition of the blood exists, it seems so to elevate the irritability of the spinal axis that any slight exciting cause is often sufficient to determine local congestions and to develop a paroxysm of convulsions.

"From the foregoing considerations we are impressed with the belief that bloodletting is the chief remedy in puerperal convulsions. In the language of Tyler Smith, 'it is the great sedative to the cerebro-spinal axis;' or as Meigs has it, 'by it we can weaken the force of the circulation; we can make the heart beat gently, and cause it to send a milder current into the vessels of the brain; we can diminish the innervative function, and control the muscular excitement, while at the same time we abate by the remedy the hazard of extravasation of blood into the medulla and brain, or of effusion of water into the ventricles.' When we consider how the contractions of the muscles of the neck during a paroxysm impedes the return of blood from the head, we must regard this last as a most important matter.

"After such abstraction of blood as the case seems to demand, we are decidedly favorable to the use of chloroform, because we believe we may by its use break up the chain of reflex sympathies, and thus arrest any further impression on the nervous centres from excentric causes. After this has been done, we may administer purgatives as derivative agents, and make use of colchicum or benzoic acid to assist the depurative action of the kidneys.

"In regard to instrumental delivery I do not see that the facts of experience are very encouraging to hasty delivery. If the means suggested had been employed, and still the convulsions persisted, we should rupture the membranes with the view of taking off pressure from the kidneys. If the paroxysms still recurred, and the os was dilated, we should deliver by the forceps; but should never think of forcibly dilating the os, or cutting it open, knowing that often the introduction of the hand has been followed by convulsions, and recollecting also that in many cases the worst forms of eclampsia have subsided, the woman not being delivered for some days after, and a happy recovery having followed. This will be, perhaps, all we can do until some organic chemist shall teach us the use of some agent which will act as a direct antidote to the poisonous element existing in the blood. At present I see no evidence that such has been found.

"I have thus brought to a conclusion this imperfect report on the improvements, and topics of special interest, at present in obstetrical medicine. More it were easy to have said, but I have already sufficiently trespassed upon the attention of the Academy. Enough, perhaps, has been written to show that I have been walking through green fields, where I could only stop here and there to cull a flower. In entering upon this task, I have experienced some of the feelings of the lover of nature who goes forth at twilight to survey the beauties of the night. As gem after gem, and constellation after constellation, rise up in splendor before him, his eye kindles with a deeper and yet more profound emotion, until at length he is overwhelmed and lost amid the grandeur and extent of the universe of God."

Dr. Carroll's Case.—Dr. Carroll reported the following: He saw the patient two days before she was taken ill. There was œdema of the limbs; she weighed when well 140 ℔s., now 175 ℔s. She had taken a severe cold. She had no pain in her head. He prescribed a mild purgative, and some wine of antimony with camph. tinct. opium, for her cough. She slept well, and went out the next day, wearing slippers. Her appetite was good. He advised her to take cream of tartar. About thirty-six hours after headache came on, and also a stricture across the chest. She arose in the morning as usual, but soon after she became blind, and was seized with a convulsion. He saw her in fifteen minutes, bled her to the amount of thirty-five or forty ounces. After being bled to the amount of twenty-five ounces, her pulse began to come up. She was advanced to the eighth month of pregnancy. In twenty minutes she had another convulsion; gave her half an ounce of salts, and ordered injections. She had three or four convulsions in quick succession. In an hour he bled her again sixteen ounces. Dr. Dodge was called in consultation. He suggested chloroform, and tried it, but with no good effect; every thirty minutes a convulsion would come on. The os was natural, no dilatation. During a fit the membranes became tense, and were pressed down with part of the liquor amnii before the head; he ruptured them. At 3 A. M. the head was pressed through the os. He went home and got his forceps and delivered her; but she was never afterwards sensible. She took some ten grains of calomel, which purged her freely; right side seemed paralyzed. She died at 7 P. M., some twenty hours after she was first taken ill.

HALL OF ACADEMY OF MEDICINE, Jan. 5, 1863.

Dr. Smith's Case.—Dr. J. B. Smith reported the following case of puerperal convulsions occurring in the Commercial Hospital. The patient was brought in at 3 o'clock in the afternoon, laboring under convulsions epileptic in character. She was a woman of full habit, weighing probably 140 pounds, pulse full and strong, pupils dilated. Prof. L. M. Lawson being in the house at the time, had her bled to the amount of twenty ounces, and was giving her chloroform when he arrived. The chloroform had no effect. He ordered injections, and in two hours applied six or eight wet cups to the back of her neck, and prescribed ten grains of calomel, and ordered one drop of croton oil to be placed far back on her tongue every hour until she was purged. He returned at 10 P. M.; convulsions still recurring; he bled her again to the amount of twenty ounces. Convulsions ceased until 6 A. M., when she had another, and died in fifteen minutes. He learned afterwards that she had been employed as a nurse in the West End Hospital, and that she had been in the habit of drinking whisky every day; she was advanced to the eighth month of pregnancy, and was seized with convulsions at 6 o'clock of the morning previous the same day she entered the hospital, and that she had had an œdematous condition of the extremities for several weeks. The Doctor said, had he known of this dropsical condition of the extremities, he would not have bled her. He thought the last bleeding hurried her out of existence. There was no attempt at labor, no dilatation of the os.

Dr. Fries—Remarked that from the history of Dr. Smith's case, bloodletting was not invalidated; and, so far as his experience went, it was in favor of depletion in cases of this kind, where the patient was of a full, plethoric habit. He had bled from both arms, and delivered with the forceps while the blood was flowing.

Dr. Carroll—Said the report of Dr. Tate was ably drawn up and met his approbation, except in the use of chloroform. He said it was the practice for a long time to rely upon anti-spasmodics in the treatment of convulsions, but in process of time it was thought better to adopt the practice of blood-letting, and experience seemed to show that this was a wiser course. In this disease we may often look for death, and no mode of treatment is to blame. The first men in the profession go in for depletion. It is almost universally the case that the limbs are swollen in the latter months of pregnancy. He thought that in the case he reported at the last meeting, the fact of the patient getting easy and relieved of the constriction across the chest, was evidence of the beneficial effects of bloodletting. He had always been in the habit of bleeding in these cases where the patient complained of pain in the head, and thought his error in the case reported was in not bleeding two days before. He was called to attend a woman since, who had been under the care of a Homœopathist. She had not had her bowels moved for five days, was vomiting, and had great pain in her chest. He purged her, and to relieve the pain in her chest, had her leeched freely to the amount of twenty-four ounces. She recovered. Thought it probable she would have had convulsions, had he not had her leeched. He always depleted where œdema was present, and thought the gentlemen would have to bring forward a great many powerful arguments to overthrow the opinion of the profession against bleeding in convulsions. It is strongly indicated when the capillary vessels are congested and the carotids are beating violently. He once bled a woman five times in eight hours, took two quarts and a half of blood, and believed he saved her life and that of the child. But he never believed he could save all of his patients with convulsions by bloodletting, and he was never mad enough to believe he could benefit them by stimulants. He always bled more or less, and always purged. Is depletion proper in congestion of the blood-vessels? In œdema there is less space for a strong circulation. In the case he reported, after drawing off thirty ounces of blood, the circulation became stronger,—so much so, he had great difficulty in tying up the arm. If the circulation is confined more to the brain, to the chest, to the abdomen, etc., it becomes us to bleed, to purge, to give antimony, etc., to bring down the circulation.

The Bennettites are as ignorant about bleeding as the savages are about the Christian religion; therefore it is absurd for them to try to reason about it.

Dr. Richardson—Said he did not hear the paper read, but understood the gentleman vindicated the use of depletion as the best mode of treating convulsions. He apprehended the same difficulty in this discussion as in the discussion of puerperal fever, advocating merely a treatment. It is necessary to investigate the character of the convulsions. There are two kinds, the epileptic and the apoplectic. If epileptic, where is there anything rational in bleeding sixty or seventy ounces. Bloodletting, it is true, produces relaxation of the uterine structures and dilatation of the os, indirectly beneficial. Is it a fact that there are a larger amount of recoveries from the antiphlogistic treatment? He very much doubted it. The doctor reported the following case. He was called to attend a woman in the north-western part of the city. Anticipating trouble, he took his forceps along with him. She was in labor for the first time. The labor had continued for thirty hours, child pressing down on the perineum, but she had no headache. She was suddenly seized with convulsions. He applied the forceps, and delivered her in ten minutes. She came out of the convulsion, but fell into a semi-comatose condition, and then another convulsion followed, but in half an hour she had no further trouble. In a subsequent labor she had convulsions again; came on before the second stage was completed. He delivered her with the forceps. Convulsions continued, she could not swallow, breathing stertorous. He gave her chloroform, but with each contraction of the uterus she would have a convulsion; pulse full, hard and unyielding, convulsions epileptic in character, continuing from 11 P. M. until 7 A. M., unconscious all the time; but consciousness gradually returned. He had another case of convulsions, in which he bled freely. Convulsions continued to recur. She lived forty-eight hours. In another case, free depletion was made use of and she recovered. He considered it injudicious to fix upon any plan of treatment without regard to the character of the convulsions. He had far more confidence in bloodletting as a preventive agent, to remove pressure from the brain; but it did not seem rational to employ it during the convulsion.

Dr. Thornton—Regretted he did not hear the entire paper, but thought it reflected great credit upon the chairman of the committee on obstetrics. He had had three cases of convulsions; all recovered, all were delivered with the forceps, two were bled, and he believed as a general rule in such cases depletion would be well borne, because there is usually a large amount of blood to lose at this time. He objected to the division of convulsions into the two classes, epileptic and apoplectic. The epileptic variety are very different from the ordinary epilepsy; there are sources of irritation which do not exist in ordinary epilepsy. Then there is another class made worse by depletion; they often arise from the impoverished condition of the blood. This state of things is brought about by the presence of urea in the blood, causing narcotism.

Dr. Murphy—Said he had seen three cases in his practice, one about six years ago. She lived near Mill Creek bridge. She was in a convulsion when he arrived, the worst he ever saw. The late Dr. Oliver had just bled her to the amount of twenty ounces, and was tying up the arm, but he thought it best to let her bleed twenty ounces more, then chloroformed her. She died. This was the only case in which he made use of depletion. The second case, convulsions came on just as the head passed the superior strait. She was not bled, and she recovered. The third case was not bled, and she recovered. These facts show that the changed condition of the blood in a pregnant woman—viz.: the presence of sugar, and the presence of albumen—have much to do with the convulsions. Secondly, that the presence of anasarca indicates a uræmic condition. The excentric causes sets the centric causes to work. Thirdly, pregnant women do not bear depletion well, because there is a predominance of fibrin, and an enormous increase of white globules; albumen is present in the blood, or she is uræmic. What do you bleed her for? In the apoplectic variety to lessen the circulation and prevent an increase of the clot; but had the clot already formed, and there was a weak pulse, he would not bleed. In convulsions the blood is poor and poisoned, and by bleeding you put the nervous system still further into convulsive action. But if she had swelled extremities, and the anæmic murmur, with a strong pulse, he would bleed to weaken the action of the heart, then chloroform her. But you can not bleed a woman out of convulsions.

Dr. J. B. Smith—Reiterated his assertion that had he known previously that anasarca was present in the case he reported, he would not have bled her, because we have not that great amount of blood where there is effusion into the cellular tissue. He had had four cases of puerperal convulsions. The first occurred in a woman advanced to the eighth month of pregnancy; depletion was not made use of, and she recovered. Second case was in a woman also in the eighth month, of full habit. She was bled at first to the amount of thirty ounces, then sixteen ounces, cupped, purged, and she died. The third case was in a woman forty years of age, attacked with convulsions five hours subsequent to labor. He bled her fifty ounces; convulsions continued for thirty or forty hours; he cupped her. She recovered with the loss of use of right arm. The fourth case was the one reported by Dr. Stevens, and no man in his senses would have bled her. Should we bleed because the woman complains of constriction across her chest? Women during pregnancy do not bear a large loss of blood without detriment. There is a physiological condition present during menstruation, when she loses a certain amount of blood. During pregnancy it is used up in the development of the fabric of the child. He took the position and believed it, that unless there is an arrest of development of the child or the uterus, there is no excess of blood. As a remedy for puerperal convulsions, does an excess of blood about the spinal cord indicate bloodletting? His patient died after the last bleeding. Would every drop of blood drawn have relieved her? You must remove the exciting cause. The best authors, as Tyler Smith, Braunn and others, are exceedingly cautious about bloodletting, and he would be when anasarca was present, indicating albuminuria.

Dr. Fries—Said gentlemen speak of œdema as indicating a poisoned condition of the blood, but it is rare to find a woman at the full period without more or less œdema of the extremities. Therefore, according to their theory, there must be a poisoned condition of the blood in all cases. Nineteen out of twenty, at the seventh, eighth, or ninth months, will have an œdematous condition of the extremities. It is also singular that females during pregnancy do not bear bloodletting well? It is not true. He had bled hundreds of times for this œdematous condition of the extremities, and reduced them. He did not bleed for a poisoned condition, because the œdema was due to pressure on the lymphatics in the pelvis. In the case first reported to-night, had she been bled sooner, would she not have been saved? It is probable; but after a clot is already formed it is very difficult to save the patient. He took it for granted that there were apoplectic convulsions, also convulsions arising from nervous excitement, and convulsions from pressure on the perineum, but not from a poisoned condition of the blood. If there is a poisoning of the blood, what are you going to do with the poison? While the patient is in the convulsion, are you going to stand there and stimulate her, or throw in something to neutralize the poison? His judgment taught him that with this treatment in persons of full, plethoric habits, strong pulse, flushed face, etc., death would result. He would open a vein, apply stimulants to the extremities, ice water to the head, etc. In fatal cases, post-mortem examinations reveal effusion around the base of the brain or a clot.

Dr. Taylor—Said upon making an examination nine hours after death of the case reported by Dr. Smith, he found the following appearances: body corpulent, extremities œdematous, lividity about the face and neck, congestion and extravasation of blood into cellular tissue of scalp, membranes of brain congested, effusion under the arachnoid, and under the medulla, but little fluid in lateral ventricles; fourth ventricle membranes intensely engorged, very red, and containing a small clot. Membranes of spinal cord very much congested, and containing many clots along the posterior surface. Stomach full of fluid, some points of engorgement, intestines healthy, fatty degeneration of liver, uterus well developed, neck not fully expanded, os but little dilated, kidneys usual size and healthy, no urine in the bladder.

HALL OF ACADEMY OF MEDICINE, Jan. 19, 1863.

Dr. J. B. Smith—Wished to take the position, that the science of medicine is a progressive one. Twenty-five years ago, but little was known of albuminous urine. One fact is to be ascertained, whether a pregnant woman has albumen? More than one-twelfth of all females who exhibit albuminous urine, have convulsions. According to Dr. Draper's analysis, in 100, one or two have albumen in their urine; the offspring are endangered from that condition.

Treatment is that of sustaining, and not depleting. He had never said anything against bloodletting, as a remedy. The records go to show that a greater number have got well, who have not been bled. He gave some authority to show, that if a woman has albuminaria, we are justified in effecting delivery by artificial means. He had no idea that if a woman was in convulsions, and had albuminaria, he would bleed. The Doctor also took some exceptions to the doctrine that pregnant women bear bloodletting better than in the natural state; if they do bear bloodletting better, it justifies the idea, that there is more blood manufactured. How many physicians bleed for pneumonia as pneumonia? Thought that many who advocate this theory do not bleed because it is pneumonia. Many bleed, purge, etc., because they have always been taught to bleed, and think it is proper.

Dr. Bonner—Said he attended a woman in confinement a few days ago; she had convulsions with her first two children, when he bled her; this time he had not bled her, and she got well. He has bled in convulsions, and remembers only one or two that died.

Dr. Johnson—Thought there was no gentleman but what would make exceptions to that plan of bloodletting. Thought the case Dr. Smith mentioned, the evening previous, should have been bled earlier. What treatment should we resort to? She died from extravasation of blood. Might have been prevented by early bleeding.

Are we to adopt some measure to find albuminuria? Shall we get our chemistry and microscope to determine the question? The Doctor thought it not proper to discuss the condition of the blood, but the best mode of treatment. Did not object to the Doctor's opinion, this evening; he is for bloodletting.

Dr. Smith—Said, he did not expect him to take his microscope and chemistry, but should be prepared to decide the question without that delay.

Dr. Murphy—Took grounds against extreme bleeding and extreme antiphlogistic treatment. Bloodletting, if carried to excess, produces anæmia and convulsions. One of the gentlemen on the other side says they bleed because the patient has a strong pulse, or a pneumonia because it is pneumonia. Even in plethora there is a great loss of red corpuscules, and a great amount of fibrin. He believed the treatment of disease was just as successful now, in the Commercial Hospital, as in the days when bloodletting was practiced so largely. In the case of puerperal convulsions, reported by Dr. Stevens, there was uræmic poisoning. The case reported by Dr. Carroll, and which he bled *pleno rivo,* would probably have died anyhow. He believed the doctrine that pregnant women bear bloodletting well, is false; the globular element of the blood is at fault. He believed the treatment of puerperal convulsions is in a transitory state. We may say there is some poison or fault in the blood itself; therefore, bloodletting does not answer the same purpose as in the epileptic, hysterical, or apoplectic convulsions of the older authors.

By bleeding, there is danger of putting her in the same condition as would result from the convulsion itself. What is the cause of convulsions? We say, in these bad cases, there is blood-poisoning. Would you bleed in Bright's disease, if the patient had convulsions? No. He might bleed moderately, or leech, in purperal convulsions.

Dr. Fries—Said, from the concluding remark of the gentleman, it would enable an acute, sharp debater to conclude this discussion at once. He places himself on the same platform with us. He considered himself a rational bloodletter. No man would bleed indiscriminately. The gentleman is neither depletionist nor anti-depletionist—he is neither one thing nor the other. He and his party came up here to enlighten us. Now what light have we got? They have defined no system of treatment for puerperal convulsions, except bloodletting in some cases. They have left us perfectly in the dark, as to treatment. If the exhibit made here to-night, by these reading gentlemen, will result in anything useful, the non-reading gentlemen have suggested just as much that would be useful. He would like to know how they would treat a woman at the seventh, eighth, or ninth month with convulsions, with an undilated os uteri; and how they would treat poisoned condition of the blood? It is a humbug to treat a case of blood-poisoning, that must terminate either one way or the other in thirty-six or forty-eight hours. He admitted, there were cases of anæmia; that there are more of this character than he once supposed. Suppose you find albuminous urine, and the patient has been perfectly healthy up to the time when seized with convulsions; she has a pulse of one hundred, full, strong and hard: what are you going to do, if you don't bleed? She can not swallow, perhaps. The judicious physician treats symptoms occasionally. He would take the shortest road possible to relieve the brain; bleeding would have a tendency to prevent the brain being fatally injured. If she could swallow, he would give active purgatives; if not, he would order active, stimulating enemata. If she could swallow, he would then order antispasmodics; if the os is dilated, he would rupture the membranes and bring on labor speedily; he would introduce his hand and turn or deliver with the forceps. The point to stop bleeding is just when the pulse comes down to what it ought to be.

The Doctor reported the following case to which he was called last night: The husband called at his office at 8 P. M., saying his wife was sick and vomiting. He simply prescribed soda, with syrup of ginger and mint water. At 10 P. M. he was called to see her, and found her in a terrible convulsion, and had had six before his arrival. She was 28 or 30 years old; had four children by her first husband; was in confinement with her first child by her second husband. The os was closed, but there was a tendency to relax; pulse 100, full, strong and hard. She weighed probably 160; had been previously very healthy; nothing anæmic about her, or to indicate albumen in her urine. He bled her near one quart; pulse yielded. The interval between the next convulsion was three times as long as between the first ones. The os relaxed; he ruptured the membranes; liquor amnii small in amount; uterus contracted; os dilated. He introduced the forceps and delivered. In fifteen minutes she had another convulsion. She could swallow. He gave her some calomel, croton-oil, and ext. aconite, but it made no impression. He also gave her chloroform in combination with ext. of aconite and syrup of poppies. She died this morning. He thought he treated her right, and would treat a similar case in the same way.

For seventeen years he practiced in the country and was in the habit of bleeding pregnant women frequently—probably bled five hundred times. If it produced anything deleterious, thought he would have seen it. On the contrary, it was attended with benefit. He only lost one case in the country with puerperal convulsions. Since he came here, this case that he reported makes the second case he has lost. He had seen but few cases here; accounted for it on the ground that diseases have undergone a great change.

HALL OF ACADEMY OF MEDICINE, January 26, 1863.

The discussion of the subject of puerperal convulsions was resumed.

Dr. J. B. Smith—Said he took the position that a woman with convulsions and having albuminuria, should not be bled. Bloodletting is not a remedy for puerperal convulsions, or puerperal eclampsia, with the present acknowledged pathology of the disease. In puerperal eclampsia proper, there is always some disease in the kidneys or some internal organs, or they are dependent upon some change in the kidneys or other organs. Believing this to be the true pathology, what do you expect to gain by bloodletting? In the majority of fatal cases from puerperal convulsions, there is no evidence of extravasation of blood in the brain. What are you going to do with the blood-poison? Is loss of blood going to change this condition? The Doctor here read the following view as expressed by Dr. George T. Elliot, in the *American Medical Times* of January 17th, respecting the treatment of puerperal eclampsia. He says:

"In contemplating venesection from my present point of view, it is very evident that it has been steadily losing favor with me for some years. The more I study the pathology of these diseases, their subsequent tendency to anæmia, even to death by syncope, the more I recognize the effect of chloroform in quieting the capillary and other circulation in these cases, and in preventing renewed congestion by warding off convulsions, the less necessary does the remedy seem to me, notwithstanding the favorable statistics represented above.

"I dissent from the positive views on this subject recently expressed in the *London Medical Times* and *Gazette*, by that high and respected authority, Dr. Ramsbotham, and regret that the remedy was resorted to in some of my cases. Indeed, for several years venesection has not been resorted to by me. Yet I do not mean to say that I may not recommend it in a certain class of very sthenic cases. It is certain that these views are not influenced by any difference in the type of convulsions observed here and in Great Britain, so far as the hospital cases are concerned. For personal observation, as well as the well-known peculiar cosmopolitan character of this metropolis, witness to the contrary. It is also my belief that the tendencies of my practice are rather to diminish alike the frequency and the amount of local bloodletting in these cases. Perhaps those cases in which the tenderness over the kidney with blood exudation or scanty urine occurs, may always be shown to be benefitted by suffering, though even in one of these occurring in a robust primipara, death occurred a few days after labor, by syncope. The tendencies to cerebral extravasation are shown to be infrequent, by no means more certainly than by an analysis of the autopsies made before recognition of the pathology of true puerperal convulsions, when the brain was expected to elucidate the cause."

And in reply to the gentlemen who say we have no treatment for puerperal convulsions, I would say we have treatment, and this is previous to labor. He would also say to these gentlemen, if they would prepare their patients prior to labor and study their true pathology, they would save more patients. Eclampsia is merely a symptom. A chemical analysis of the urine should be made, and when there is albumen present, and the woman has had convulsions, it is right to produce abortion or premature labor. A woman is not safe even ten or twelve days after confinement.

Dr. Fries—Said in the previous discussions we had no plan of treatment presented by the gentlemen on the other side of the question; now, however, we have a system of treatment presented, but what does it amount to? It consists simply in going back three, six or eight months, or even the whole term of gestation, and watching the case. The gentleman advocates the New York system of treatment, which is that of producing abortion. It is an outrageous treatment. He recommends nothing else as proper in the treatment of these cases.

Some of the best pathologists say a little albumen in the urine is the normal condition.

In regard to the case occurring in the hospital, does the gentleman say bloodletting killed that patient, in which a clot was found in the brain, and also extravasation? If some one would prove this to him, he would throw away his lancet.

The theory of albuminuria or uræmia being the whole cause of puerperal convulsions is a humbug.

Dr. Richardson— Said he did not believe there was any one plan of treatment in puerperal convulsions, and this discussion had not yet taken a turn to make him believe there was. It seemed strange, there was no plan of treatment but bloodletting. Suppose the woman is of full habit, no albuminuria — why not give chloroform? It does not produce a greater frequency or fullness of the pulse. Why not, then, as a preventive of fatal injury to the brain, resort to it? He had not seen many cases of puerperal convulsions, and never had seen a persistence in the fullness and redness of the face, indicating a rush of blood to the brain.

How does bloodletting act? It does not reduce the fibrin one particle; it does not change the albumen in any degree. Do you bleed an epileptic patient with an idea of shortening or preventing a recurrence of the paroxysms? No intelligent physician will.

Bloodletting really does good in only one condition: where there is rigid, unyielding cervix and os uteri.

It does not follow, because the physician has not seen the case before, he must bleed her. You might just as well blame him for not curing a bad case of diphtheria with laryngeal and tracheal complications. Bloodletting in advance would be detrimental. Physicians should know beforehand the condition of pregnant women; otherwise, he can only do that which is reasonable, as he would in any other disease. There is no testimony that a larger number are saved by bloodletting than by any other treatment. The case he reported as having convulsions in her first two labors, in her third pregnancy he attended to her general health six weeks before her confinement. Puffiness had commenced, but subsided after two or three weeks' treatment. She went through her confinement without any trouble.

Dr. Murphy — Bore testimony to the correctness of the opinions expressed by his friend, Dr. Richardson.

And he was glad his non-reading friend had been brought to believe there was such a thing as blood poisoning. He was asked how many women he had bled? He said very few. Who bleeds now, except such persons as can not treat typhoid fever without purging and salivation? We can not bleed these women or give heroic doses of medicine. Has the gentleman ever read an analysis of the urine? He would not treat his patients as the older authors taught; simply because they would not bear it.

If the gentleman will read what has been written on the subject of white kidney, he will not think so strange of producing abortion in cases of albuminuria. We have come to know an inflammation is a state of hypernutrition.

Dr. Carroll — Said he felt sorry we had so many exhorters; they do not examine the root of the matter, but take the top ends. They have not taken a position, only founded an assertion. This is what he called an exhortation. What is the view of practicing medicine, unless to bring an unhealthy condition into a healthy one? Hence, we try to produce a normal condition.

What causes this bad condition of the blood? What the exalted nervous condition, and the heart itself? And the object is to bring those organs back to a healthy condition.

The typhoid fever of the country, it is said, you must not bleed. He had bled hundreds of cases. He bled them now, because in the outset there is local difficulty in the brain. He had practiced more than forty years, and he never gave stimulants in typhoid fever during the first ten days. If there is congestion of the mucous membranes, stimulants would increase it. He would rather act gently on the secretions; and this was the opinion of the late Dr. Drake, and the best men in the profession. Believed there was not a man in the Edinburgh School who was not a hypocrite. Cullen was the only man, he believed, who kept himself clear. Why must you not bleed in effusion, in œdema? You take a case of dropsy following scarlet fever, when there is danger of convulsions; you will almost always save the patient by bleeding. If you bleed, you relieve the brain. In all cases where the kidneys do not act well, you cup, leech and purge, and you bring on healthy action; by bleeding you lessen the amount of fibrin.

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Puerpury.— The loss of weight during the first eight days of labor, occasioned by excretions, secretions, especially of the lochia and milk, increased excretion of urine, and the involution of the genitals, is on an average the twelfth part of the mother's body. This loss is the greater in proportion to the proximity of the labor to the normal term of gestation. The loss of weight due to labor and childbed amounts on an average to the fifth part of the body-weight of he pregnant woman.— *Brit. and For. Med.-Chir. Review*, Oct., 1862, rom *Mon. f. Geburtsk.*, January, 1862.

Correspondence.

Boston, Mass., January 7, 1863.

Messrs. Editors.—Already the sands of another year have begun to count on the dial-plate of time, and the future opens before us with its hopes and doubts, its moments of depression and gleams of joy; while the lessons of the past still linger in our memories as beacon lights to stimulate us to renewed efforts in all honorable and just pursuits, as well as to warn us to avoid the unprofitable experiences incident to one's career, whether in his individual capacity, or as a member of the body-politic, whether groping in the labyrinths of science, or in the humbler walks of life.

As medical men, how stands the matter with us? What are the lessons of the hour we should heed? What is the aggregate standing of the profession, and what has been the progress of medicine and surgery in this country during the year?

To answer these questions would consume more time and space than I have now at my command. A few reflections will suffice.

At this season of the year, it is fit and proper that the physician should note the results of his labor, both in a pecuniary and medical sense. He can survey the past, and learn how his services have been appreciated, whether in that *substantial* manner that puts bread into his mouth, accompanied with a deep and lasting gratitude, or in a way that taxes his energies, only to receive in return the cold ingratitude, too often bestowed upon those worthy of better things, by the hands of persons seeking their aid. It is a pertinent question to ask one's self, Am I better qualified to perform the daily duties of my profession than I was twelve months ago? or, in other words, Have I so improved my opportunities both in study and observation during the year, that I am better prepared to practice the healing art than at any past time? If the physician can not answer these interrogatories in the affirmative, and that, too, in a *positive* manner, he should at once abandon his calling, and say to the community that when he entered it he mistook his destiny.

In this age of progress in the arts and sciences, and in all that pertains to the material interest of a community or nation, the physician is derelict in his duty, if he does not avail himself of the best resources at his command, to enrich his mental "stock in trade," that he may always be found ready for the emergency of the hour, to fulfil what the people have a right to demand of him. As is the individual, so often is the collective mass of mankind. If each physician should avail himself of the experience of the past, with a determined will to improve upon it, the profession as a body would take a higher standard of excellence, from year to year, which would be commensurate in part, if not wholly, with other branches of science; while, on the other hand, if the mass of medical men, forgetful of their obligations to themselves and their patients, neglect the golden opportunities for self-culture, both at the bedside and the closet, the *few earnest members* of the profession will reap the harvest, both in a pecuniary sense, and in the development of those powers of thought and discrimination which give prestige and success.

The year begins with the horrors of civil war upon us, with the fierce passions of one section arrayed against the other, with fields watered with some of the best blood of the nation, with desolation and suffering in many portions of this once peaceful and prosperous people. Amid this scene of carnage and death, this strife to destroy our nationality on the one hand, and to reëstablish it on the other; what has been the status of medicine and surgery during the year? It is quite evident that since this unholy warfare commenced, military surgery has received such an impetus in this country that hereafter it will form an important part in the medical literature of the age. Before this eventful epoch, the profession of to-day, in the United States, has had but little experience in this branch of our art. But this long and continued struggle opens a wide field of observation, from which surgery gathers its rich and varied laurels. The destructive missiles of war are becoming our teachers; for in proportion as they mutilate the more important tissues of the body, so is the skill of our art taxed to repair the injury inflicted.

The relative successes of primary and secondary operations, the negative results of thigh amputations at the upper third, the latitude given to exsections, the dispassionate discussions upon the merits of active and conservative surgery, have established very many important truths, which will flow into their proper channel, and serve to inspire the timid, or check any undue rashness on the part of those into whose hands are committed the intrepid heroes of the hour.

The great demand for hospital accommodations in cities, and upon the field, has given a wide scope for the suggestive minds of our best sanitarians. Much, therefore, has already been done to secure and apply all the known improvements in ventilation, so that the sanitary condition of the sick and wounded shall be every way in keeping with the vast resources of the government, and the immensity of the issues now going on. With all that has been accomplished, there are still opportunities for further efforts in ameliorating the wants of those stricken down by sickness or the casualities of war.

During this rebellion, northern surgeons have become better acquainted with the diseases incident to more southern latitudes, thereby adding to the common fund of therapeutical knowledge. Even those who have remained at home, attending to their ordinary practice, have awakened into newness of life, and many of them whose heads are white with years, have shown hearts burning with patriotic devotion to "do something for their country," by alleviating the sufferings of those fighting her battles.

We can therefore safely say, in taking a careful survey of the events of the year, that medicine and surgery, and their collateral branches, have made a positive advance, especially that pertain'ng to the military department.

Let the profession, then, not be unmindful of the errors of the past, or of the results of the present, as they may serve as incentives to a higher and nobler perfection, in all the legitimate ways and means devised for the relief of the physical and mental condition of mankind. The Esculapian ties that bound together so lately the members of our National Association, in both extremes of the Union, have been broken. The social meeting and the friendly grasp are seen no more. Notwithstanding all this, let us hope that, out of this turmoil and madness, a new era may dawn upon us; that we may be once more a united and happy people, and that upon the altar of our common country, amid the cluster of sciences, none shall shine brighter and more glorious than the divine art of medicine and surgery. B.

Reviews and Notices.

The Institutes of Medicine: By Martyn Paine, M.D., LL.D., Professor of the Institutes of Medicine and Materia Medica in the University of the City of New York, etc., etc. Seventh edition. New York: Harper & Brothers, publishers. Pp. 1130.

We have had upon our table for some weeks, this last edition of Dr. Paine's Institutes. In the preface, the author states that the present impression of this work is distinguished from the preceding by the addition of several brief *notes, and* some other improvements.

It being the author's desire that it may be regarded as the standard edition, it has been designated the seventh.

As an earnest and diligent writer, Prof. Paine has no superior in America. The present work is a monument of his learning and industry. His style is manly, vigorous and original. Although radically differing from him in many of his expressed opinions, we can not but admire the man, on account of the honesty and boldness with which they are given. No doubt can be felt of *his* conviction of their truth; and hence his great desire to convert others to his views.

We can not refrain from giving a few quotations from the section on bloodletting, as they embody not only his views, but also those of a respectable class of the older practitioners of the present day. At page 737, in speaking of the treatment of inflammation and nervous congestion, he says: "From what has been now said, and of the treatment of inflammation and nervous congestion, we may make up our minds that there can be no tampering with the complicated forms of fever, whether associated with one or the other of the local conditions of disease. In either case, especially in continued fever, general bloodletting is more imperatively demanded than by either of the local conditions in their independent state; and the earlier this important step is taken the better. Nor should we strike with a sparing hand, nor move with a tardy pace, but rather let the first be a heavy blow, and as often repeated as the foe may rise."

At page 759, in speaking of epidemic erysipelas, as it appeared in Vermont, he says: "This is another wide-spread and prostrating disease, in its epidemic form, which has beguiled the multitude with the fatal use of the bark and wine treatment."

Again, at page 760, in speaking of the treatment of pneumonia, he says, having reference to Louis: "Apropos of this distinguished Frenchman, who is opposed, mathematically, to the abstraction of blood in pneumonia, erysipelas, typhoid fever, and acute intestinal inflammations, with their complications, also of other local inflammations. And so, too, of many other distinguished French physicians, who rely mainly on the waiting system, or on the tart. emetic practice. But what are the results? Chomel makes the average mortality from pneumonia, at the hospitals, one in four. Louis lost one in three, and Legarde one in three. But in the United States, where bloodletting is thoroughly practiced, the loss does not exceed one in twenty to twenty-five."

Our author modifies this statement in a note of 1860, by excepting large cities and hospitals in the United States. He says nothing of the results obtained by Dr. J. H. Bennett, of the Edinburgh School, whose report shows one death in thirty-four cases.

We will close these extracts with the following statement of Dr Paine, as embodying his opinions of the necessity of the free use of the lancet in the treatment of disease, and the reasons therefor; as also showing his great respect for the "fathers of medicine;" his reliance upon their precepts, his seeming disbelief in medical progress,—his faith in men and things long past:

> "The reader will recollect that I had been last speaking of the respect which is due to the experience of the great sages of medical philosophy. I was early taught to listen to their conclusions, and to adopt their counsel. For thirty years I have watched attentively the effects of bloodletting as practiced by myself and by many others, and have long since come to the conclusion that it is safer to put the 'two-edged sword' into the hands of the ignorant, or the imbecile, or those who make a trade of the profession, than to forever blunt its edges, so that it will not cut, before it is trusted to their use. We everywhere see victim after victim sacrificed to timid admonitions, and worse examples. While you, and all of us know, that it is a rare phenomenon that a patient is slain, seldom injured by the lancet."

This book should be in the library of every reading physician; and we cordially recommend it to the attention of our readers.

For sale by Robert Clarke & Co., 55 West Fourth-street.

Thirty-Sixth Annual Report of the Board of Trustees and Officers of the Ohio Institution for the Education of the Deaf and Dumb, for the year 1862.

Sixth Annual Report of the Ohio State Asylum for the Education of Idiotic and Imbecile Youth, for the year 1862.

Twenty-Fourth Annual Report of the Central Ohio Lunatic Asylum, for the year 1862.

Eighth Annual Report of the Southern Ohio Lunatic Asylum, for the year 1862.

Annual Report of the Indiana Hospital for the Insane, for the year 1862.

The above reports of the condition of several of our prominent benevolent institutions have come to hand, exhibiting a gratifying degree of prosperity and usefulness.

The Ohio Institution for the Deaf and Dumb is under the management of Rev. Collins Stone, to whom applications are to be made for admission of pupils, or any information respecting the rules and regulations of the Institution. The session of the pupilage commences on the second Wednesday of September, of each year, at which time alone, except in extraordinary cases, pupils are admitted. The whole number under instruction, during the year: males, 112; females, 70; total, 182.

Dr. G. A. Doren is superintendent of the Ohio State Asylum for the Education of Idiotic and Imbecile Youth. This Institution was established in 1857, and appears to be steadily growing in usefulness. We have watched the progress of this Institution ever since its establishment, with a lively interest, and we are gratified with the encouragement these asylums have met with, both in this country and Europe. It will be a great thing for the poor unfortunate subjects of this charity, if they can be so trained, mentally and morally, that from mere wrecks of humanity they become restored to a comfortable degree of mind.

The following extract from the report indicates the success met with:

> "Fifty-seven children have been under instruction during the year; marked improvement has been observed in all. Aimless and involuntary movements have been replaced by those in response to the will, while the preliminary cultivation of habits of attention, order, and obedience, in the school-room and gymnasium, has resulted in productive labor in the garden, shop, and sewing-room, as well as in the efficient performance of regular domestic duties.
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> "Of the whole number under instruction, twenty-eight read and write; twenty-four appreciate, in some degree, the relation and significance of numbers; eleven boys have learned to work in the garden and shop; fifteen girls sew neatly—ten of this number being able to make a garment. They have also been taught to perform appropriate domestic duties."

Application for the admission of pupils, and all other general correspondence, should be addressed to the "Superintendent of the State Asylum for Idiots," Columbus, Ohio.

The *Central Ohio Lunatic Asylum* reports the past year as "prosperous and successful in the general affairs and operations of the Institution."

Dr. Hills, the faithful and efficient Superintendent for the past six years, has been reëlected to that position, and is assisted by Dr. D. L. Ely. The Board takes occasion to pass a tribute to the merits of these officers, for the faithful and efficient discharge of their duties.

The total number under treatment, during the year, was 209 males and 200 females; a total of 409, and the daily average was 260.

There were discharged, 69 males and 80 females = 149. Remaining in the Asylum, Nov. 1, 1862, 140 males and 120 females = 260. Of those discharged we have:

Recovered,	44 males,	46 females,	= 90.
Improved,	9 "	13 "	= 22.
Unimproved,	11 "	13 "	= 24.
Died,	4 "	9 "	= 13.

We also find a full table of the statistics of the Asylum for the entire history of the Institution—twenty-four years.

The total expenditures for the year, was $35,490, but on account of the large advance in the price of articles of expenditure for the establishment, an increased appropriation for 1863 is asked for from the Legislature.

The term of office of the Superintendent of the *Southern Ohio Lunatic Asylum* expired on the 1st of May last, and the Board of Trustees elected Dr. Richard Gundry, who has been assistant physician for five years past, Superintendent for the following six years,—a most suitable appointment. Dr. F. M. Andrews, of Dayton, is appointed assistant.

The number of patients, during the year, was 122 male and 129 female = 251. Of these there were discharged as follows:

Recovered,	28	males,	33	females,	= 61.
Improved,	5	"	6	"	= 11.
Unimproved,	5	"	2	"	= 7.
Died,	3	"	8	"	= 11.
Total,					= 90.

Remaining under treatment, Nov. 1st, 1862, 161.

The statistics and general remarks of the report are of much interest. The current expenses of the past year amounted to about $24,000; an increased appropriation, however, being urged for the coming year.

The Annual Report of the *Indiana Hospital for the Insane* exhibits that Institution as being in a prosperous condition. For the year ending October, 1862, there were under treatment, in the Hospital, 257 males, 243 females; total, 500.

Discharged *restored*,	63	males,	51	females;	total,	114.
" *improved*,	12	"	14	"	"	26.
" unimproved,	24	"	23	"	"	47.
Died	7	"	7	"	"	14.

The current expenses of the year were $29,100, and the cost per week, of each patient, exclusive of clothing, repairs, and improvements, is $1.90.

The Superintendent is Dr. James H. Woodburn; Assistants, Dr. J. M. Dunlap and Dr. J. F. Cravens.

Editor's Table.

Ohio Surgeons.—We understand that the Secretary of War and the Surgeon-General of the United States have written letters, complimenting in high terms the skill and efficiency of the surgeons attached to the regiments from our State, serving in the army. The Secretary of War has said that they are superior to those of any other State. We believe that these opinions are not only true, but well deserved. It is true that a few men were permitted to enter the army from our State without having passed an examination; but with these exceptions, all the rest were submitted to an examination. We attribute the high standing of the surgical staff of our State to the requirements exacted by the Medical Board. In addition to demanding certificates of good moral character, temperate habits, and reputable standing in the profession, all were submitted to a brief, yet practical examination. With few exceptions, they have acquitted themselves with honor. The position of Medical Director of three of the divisions of Gen. Rosecrans' army is now filled by surgeons from our State.

Puerperal Convulsions. — We occupy considerable space, in the present number of the *Lancet and Observer*, with discussions on Puerperal Eclampsia, and kindred topics. In the Cincinnati Academy of Medicine this discussion has largely turned upon the value of bloodletting, and the indications for the use as a remedy. The inquiry is raised—Why do we bleed in puerperal convulsions? that is, what are the indications for bleeding? To what extent is bleeding to be carried, when used? What are the relations of eclampsia to uræmia? What are the relations of abuminuria to pregnancy? Such questions as these are agitating the minds of the profession here, and that sort of skepticism which precedes progress, is largely prevalent upon all these topics.

Bleeding will doubtless still continue to be regarded as an important remedy, in the management of these fearful cases; and yet very many of them are bled early—bled boldly—bled persistently, and they go down regularly and surely to a fatal result. It is important to be very confident, therefore, as to the exact condition demanding the lancet, and very confident as to the extent it shall be used; and if many of these cases are not to be treated with bloodletting, it is high time we determined upon some philosophical and rational plan of treatment instead; that is, if they are within the reach of our art. We have, therefore, felt the subject of grave enough importance to dwell upon its discussion.

Medical Journalism.—We have had occasion to speak of the great mortality in American medical journals, within the past two years, some of our most valued and ably-conducted being obliged to yield to the pressure; of those that remain, there is a constant evidence of embarrassment, that is grievous to behold. Some of our exchanges continue in the even tenor of their way, as of old. Thus our valued friend, the *Boston* (weekly) *Journal*, reaches us with regularity and promptness. So, too, does that very able weekly, the *New York Medical Times*, though it is at the same time understood that its publishers have already sunk several thousand dollars on the enterprise. On the other hand, the *Medical Monthly*, of New York, about one of the best medical monthlies in the country, is now two months behind time; the last number received being for November, 1862. Both of the Chicago journals act after a sickly fashion—being tardy—about in the same degree; we have received nothing from them for at least two months. The *Philadelphia Reporter*, which has been for some time issued weekly, and has displayed a commendable degree of energy and enterprise, and has been supposed to be blessed with a large and desirable patronage, has yielded to the times, and, for the present, compresses two numbers in one, and issues semi-monthly. We do not remark upon these things with any spirit of boasting, for all the medical journals in the country are needed, and ought to receive a living compensation and support. It therefore becomes medical men to see to it that, in these critical days, their favorite periodicals do not lack for the sinews. Supply them with good, vigorous communications, and plenty of new-paying subscribers, and they will doubtless weather the storm.

Our Acknowledgments—Are due to various friends for acceptable articles for the *Lancet and Observer*. There has been, of late, rather a deficiency in our supply of original communications, which we trust, from present appearances, is to be more fully met than for a few months past. We also desire to express our thanks to one and all for new subscribers, prompt payments, expressions of regard for our journal, and all this kind of friendly "aid and comfort." Though we can not acknowledge our obligations individually, we nevertheless appreciate these good offices, and do not forget them.

Medical Teaching; Summer Schools. — There seems still to be a large demand for Army Surgeons; indeed, the supply of *reliable* men is decidedly deficient. Several of our medical schools have taken advantage of this increased demand, to give an extra course of instruction, and, as we believe, with satisfactory results. In the advertising department of this journal will be found the announcement of the Long Island School, with a strong Faculty, commencing its regular course on the 12th of March—this school, however, has always been a spring school. The Cincinnati College of Medicine and Surgery, it will also be observed, has in like manner been stimulated to give a regular spring course; and, we understand, the Medical College of Ohio, which is closing up a very satisfactory session, will again, as last year, give a spring course.

How far this process of pushing forward rapid additions to the ranks of the profession is expedient in the long run, would, perhaps, admit of some question. The present urgency seems to afford a degree of plausibility for the extra effort in that direction, and, perhaps, for the present, debars any serious debate.

Bedford's Obstetrics.—We have received the *third edition* of this capital book, just as we are going to press, too late to notice it regularly; we shall do so, however, in our next issue. We are gratified to notice the success which has followed this new work; it has met with a rapid sale, and has been already adopted as text-book in many of our leading medical schools. We are also free to say, that this success is fully deserved.

The Transactions of the Indiana State Medical Society is already, and thus promptly, on our table. We have so recently published entire one of its contributions, and noticed very fully the address of the President, that any special notice now is scarcely called for.

Dr. J. F. Hibberd, of Richmond, is the President for the year 1863, and Dr. W. B. Fletcher, of Indianapolis, Secretary. The Society adjourned to meet in Indianapolis on the third Tuesday in May, 1863.

Dr. Sanford B. Hunt, of Buffalo, has received an appointment as Surgeon in the U. S. Navy. Dr. Hunt is well known in the profession as a very able, cultivated physician. He was at one time the Professor of Anatomy in the Buffalo Med. College, and Editor of the *Buffalo Medical Journal.*

Surgeon-General of New York.—Governor Seymour has appointed Dr. John V. P. Quackenbush, of Albany, Surgeon-General of New York. Dr. Quackenbush is a professor in the Albany Medical College, and sustains a fair reputation for courtesy and professional ability, and will doubtless bring to the duties of his office a heart for the work.

—— Dr. Glover Perin, Surgeon U.S.A., and lately Medical Purveyor in this city, has been relieved by Medical Storekeeper Rittenhouse, and ordered to assume the responsible post of Medical Director of Gen. Rosecrans' army.

W. J. M. Gordon & Bro.—Such of our readers as prepare their own prescriptions and keep up a supply of drugs for dispensing to patients, will be interested in the Price Current of the Messrs. Gordon, which is inserted in the advertising department of this number.

Died, Jan. 7th, 1863, at Mogadore, Summit Co., Ohio, MARY W., wife of Dr. J. C. FERGUSON.

MEDICAL DIRECTOR'S OFFICE, WASHINGTON, D. C., Jan. 16, 1863.

SIR:—I have the honor to report that all the churches in this city, and in Georgetown, which were taken by the Government for military hospitals, have been restored to their respective congregations, with the exception of Trinity Church in this city, ordered to be retained by the Secretary of War.

Very respectfully, your ob't serv't,
R. O. ABBOT, *Surgeon U.S.A., and Asst. Med. Dir.*

Surg.-Gen. W. A. HAMMOND, U.S.A.

At Vienna, on the 13th ult., the fiftieth doctor-jubilee of Dr. F. Jäger was celebrated. He received the good wishes of all the medical corporations; a new doctor's diploma was handed to him by the Doctorial College. Dr. Jäger's merits and works as an oculist are well known. He was, we read, the most faithful disciple of his master, Beer—the founder of the Austrian school of ophthalmology. His fame has spread through all Europe; and numerous orders adorn his breast.—*Brit. Jour.*

Special Selections.

Use of the Forceps in Tedious Labor.

Dr. Hamilton, of Falkirk, made a communication to the Edinburgh Obstetrical Society (Nov. 27, 1861) on this subject, and began by explaining that he had first been led to the publication of the results of his obstetric practice in consequence of a statement respecting the mortality of forceps cases, contained in a review of Dr. Murphy's work in the *British and Foreign Medico-Chirurgical Review*, for October, 1852. When he (Dr. H.) was first about to commence practice, he had been greatly struck by the observation made by Dr. Reid, who had probably been known to many of the Fellows present as a skillful and experienced accoucheur, to the effect that forceps might be used in cases of tedious labor much more frequently than they usually were, not only without danger to the patient, but to her advantage. Having found other trustworthy practitioners of the same opinion, he (Dr. H.) had acted on the hint, and from the time when he first began to practise, in 1833, up till 1852, he had employed the forceps in a large proportion of cases of labor, and the results of his experience had only confirmed him in his opinion of their safety and usefulness. He had then been astounded at seeing the statement of Dr. Murphy as to the great fatality in forceps cases; and having himself been under the impression that the use of the forceps was rather gaining ground, he had determined to investigate the correctness of conclusions so entirely opposed to those he had arrived at. "The question," as he had stated in a paper he then wrote on the subject, "to be discussed, is presented to us in a condensed form at p. 422 of the *Review* referred to, the general conclusions deducible from the statistical facts collected by Dr. Murphy being—1st. That in the forceps deliveries occurring in 78,892 midwifery cases, in the hands of British, French, and German practitioners, nearly 1 in every 4 of the children was stillborn. 2d. That, in protracted labors, 'so far as the children are concerned, the proportion stillborn is very much the same, whether the forceps be employed or not; the difference, if any, being in favor of leaving these cases to nature.' 3d. 'That the use of instruments is to be discountenanced in all but exceptional cases of this kind, in which the habit of the patient is too feeble to admit of her enduring a protracted labor without risk of exhaustion.' 4th. That Ramsbotham employed the forceps once in 729 cases, Joseph Clarke once in 742, Collins once in 684, Kilian once in 78, Carus once in 14, Siebold once in 9; and 'Dr. Murphy's recommendation is to employ them only in cases of positive arrest,' unless dangerous constitutional symptoms are present." As opposed to this high mortality from the use of the forceps, he (Dr. H.) had adduced the results of his own practice, and had stated that, whilst using the forceps in every seven or eight cases of labor, he had delivered 316 children, all of whom had been born alive. He had subsequently published an article in the *Edinburgh Medical Journal*, claiming for the use of the forceps the same continued immunity; and now he could point to 731 children consecutively born alive, in the delivery of from 90 to 100 of which the forceps had been employed. He (Dr. H.) thought that this startlingly favorable result indicated that the mortality which was usually attributed to the employment of the forceps was rather due to the delay in their application. He believed his practice represented very fairly that of a general country practitioner; though perhaps now that he had acquired more experience the proportion of difficult cases coming under his care might be somewhat above the average, and he now found that cases which he once thought dangerous and difficult became comparatively easy, simply from his constantly following out the principle of not delaying too long the application of the forceps. Remembering the great law that the mortality in parturition increases with the duration of the labor, and believing that the danger was greatest in those cases where the delay occurred during the second half of labor, he was always anxious to shorten this stage by every means compatible with the safety and well-being of the patient and her progeny. The first stage might go on for many hours, sometimes for days, without involving the patient in any risk, and he almost never in any case interfered until after the completion of the first half of labor. But even in an otherwise apparently normal case, if the child's head remained longer than two hours in the maternal pelvis, and the pains were at all severe, he then believed that the child's life was becoming endangered, and he never hesitated in applying the forceps. He had now employed the forceps in about 200 cases, and found no danger whatever if the head had not been allowed to become impacted. He employed the forceps, in most cases, as a direct extractor, but in some cases also to rectify the position. In one patient he had found it necessary to employ the forceps in nine out of her twelve confinements, although her pelvis was sufficiently roomy, in consequence of the fœtal head failing to make the necessary turn in the pelvis. And now he might be allowed to state what he did not do. In the first place, he now almost never used ergot of rye in any midwifery case. He had rarely at any time employed it as an adjuvant in the first stage, and latterly he had also refrained from administering it during the second portion. He had no prejudice against the drug, but he had never been able to see that it fulfilled any good indication during the first stage of labor, and gradually he had come to give up its use altogether, so that he had not administered it to one out of his last 400 parturient patients. Secondly, he never greased the forceps, as in lectures and text-books we were instructed to do. He thought the greasing unnecessary, because there is usually no difficulty in introducing the instrument, and the unguent interfered with the firm hold of the fœtal head, which was necessary to permit of due tractile force. When he first went to Falkirk he had attended a case along with an old practitioner, where the patient was delivered of twins, both of which were born dead after a tedious labor. On Saturday last he had attended a case of precisely the same kind, where he did not doubt that he would have had the same unhappy result of producing two stillborn children, had he not extracted the first child with the forceps after its head had been but a short space of time on the perineum: as it was, both children lived. He had described a case where he could not get the head of the child brought into the pelvis in a right direction, and where, after long-continued efforts with the forceps to rectify the position of the head, had failed, in consequence of its always turning round again, he thought from the opposition presented by the rectum, he had at last to perforate the head and deliver by craniotomy. He had recently met with a similar case, where the head lay in the left oblique diameter occipito-anteriorly, but could not be brought down into the pelvis until he had turned it by means of the forceps through three-fourths of the circle of the pelvic brim, so that at last it presented occipito-anteriorly in the right oblique diameter.

Dr. Hamilton maintained that the forceps was preferable to turning, because he had seen several children born dead where the latter operation had been employed, and in one case the vertebræ of the neck had become dislocated whilst the child was being extracted, so that delivery could not be completed until the fœtal head had been opened. He always used Zeigler's forceps, and usually applied them after the head had descended so far into the pelvic cavity as to allow the tip of the ear to be easily felt by the finger. In reply to a question put by Dr. Moir, Dr. Hamilton repeated that he had not had a single still-birth among 731 children that he had delivered successively; and in reply to a question by Dr. Figg, he (Dr. H.) explained that although he had delivered some children that died very shortly after birth, yet he did not count a child stillborn if it continued to breathe, if only for five minutes.—*Edinburgh Med. Journ.*, Oct., 1862.

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Paracentesis Thoracis; a Resume of Twelve Years' Experience.

(Read before the Boston Society for Medical Observation.)

By Henry I. Bowditch, M.D.

In the *American Journal of the Medical Sciences*, April, 1852, I published an article on Paracentesis Thoracis, with cases. In January, 1854, I gave, in the *American Medical Monthly*, an analysis of twenty-five cases of the same. Still later I made further statements on the subject in the *Boston Med. and Surg. Journal*, 1857, and now I wish to give to the Society a brief *résumé* of the principal results of the operation, as performed 150 times on 75 persons during a period of nearly twelve years, viz., from April 17, 1850, to Dec. 17, 1861.

During the above period I have operated 150 times on 75 persons, and have seen other gentlemen operate on 10 more, making 160 operations on 85 persons.

Innocuousness of the operation.—I have never seen the least *permanent* evil resulting from any operation, and *only the slightest temporary* difficulties, such as pain, slight dyspnœa, stricture, or cough, etc. This, I think, shows the innocuousness of the operation by means of the exploring trocar and suction pump, as suggested by Dr. Wyman.

Frequency of the operation.—One lady (case formerly reported) I tapped 9 times during 8½ months; commencing when she was 4½ months pregnant; and in whom the orthopnœa was, several times, so great that death, I have no doubt, would have supervened within twenty-four hours, if the operation had not been performed. She is now tolerably well, but with a contracted chest, as is usual in chronic pleurisy.

In striking contrast with this case, as it regards the *frequency* of the operation, while resembling it in the number of times it was performed, was the unique case of an elderly man, very recently under my care, and in which I tapped eight times in six weeks! The patient himself, a physician, earnestly and even solemnly demanded of me the operation as a mere means of relief to intense distress. As he jocosely remarked on one occasion, he considered it one of his "luxuries."

Cases in which the patient recovered wholly.—Twenty-nine out of the seventy-five patients got wholly well, apparently in consequence, chiefly, of the operation. The operation was performed generally when severe symptoms were manifest, and I was called in consultation. In a few, a great quantity of fluid was recognized by the physical signs alone, the rational having been slight; but, as the disease was chronic, an operation was deemed necessary. In all these cases, the operations seemed the *first step* towards a cure.

The character of the fluid, and its influence on the prognosis.—In twenty-six out of the seventy-five *serum* was found; and twenty-one of these patients got wholly well. If after the first operation the fluid becomes purulent, an almost certain fatal prognosis should be made. I have seen six such cases. Four of the patients died, two were lost sight of, but, when last seen, were failing.

Pus was found at the *first* operation in twenty-four cases. Once, it was of the consistence of honey, but I easily drew it through the exploring tube. Seven of these patients recovered wholly; seven died; nine were relieved one or many times; but they had either a long or tedious illness, terminating usually in phthisis, or a fistulous opening, or a still doubtful result.

A *sanguinolent fluid*, at the first puncture (and by that I mean a dark-red, thin fluid, evidently stained with blood, though not coagulating), I consider almost certainly fatal, and a consequence of some malignant disease of the lung or pleura.

There were seven of such cases. In six the patients died. In one there was a doubtful result, but apparently fatal tendencies were commencing. If the fluid is found sanguinolent at the second or any subsequent puncture, I deem it of comparatively *little* importance towards the prognosis.

A mixture of *bloody purulent fluid*, at the first operation, is usually fatal. Three cases, all fatal, occurred.

A *fœtid, gangrenous* fluid is very rare, only one case having occurred, and that fatal; but in this case infinite relief from horrible orthopnœa was obtained, and it never returned, though the patient sunk and died in a few days. Gangrenous pleura was found.

I have operated once in *pneumo-hydrothorax* with temporary relief and comparative ease for several days. Many theoretical objections may be urged against the operation in such a case. To such objections I have simply to answer that, as the operation can do no harm and may give much relief, I shall operate again in any case where the dyspnœa may be so great as to require it.

Cases where no fluid is obtained.—Finally, in seven cases I got no fluid. These cases occurred usually in the earlier operations, and the failure was often owing, no doubt, to the cautious and slow manner with which I plunged the trocar between the ribs, carrying thus the false membrane of the pleura costalis before the instrument, instead of piercing it; so that a valve was really formed over the end of the canula. At other times I have little doubt that an error of diagnosis was made, and that instead of a fluid there was simply an unexpanded lung and thick false membranes on the pleura, causing as much dullness on percussion and absence of respiration as a fluid would have done. The differential diagnosis of the two was not, at first, quite so easy as it is now. Inspection, usually, is the test between the two conditions; the intercostals being distinct, and depressed when a membrane exists; but very indistinct and level with the ribs, or possibly prominent, when a fluid occupies the chest.

Once an immense tumor occupied and uniformly distended one pleural cavity, and in its course presented all the phenomena, natural and physical, of simple pleurisy. I tapped three times, viz.: at the back, side, and front, at the same visit. No evil followed.

A member of this Society asked me my experience as to the good results or otherwise in operations on the right side; observing, at the same time, that one European writer (Trousseau?) contended that pleurisy of the right side is often or always tuberculous. I could not answer definitely, although my impressions were against the truth of the assertion. On referring to the brief summaries, and not to the original notes of my cases, where I find the sides named in twenty-five cases, I find that in these the operation was performed with the following results:

	PLEURISY OF	
	Right side.	Left side.
Death	4 times.	5 times.
Cure entire, without symptoms of phthisis, except in one, but pleurisy was cured in that.	9 "	4 "
Doubtful result	1 "	2 "
	14	11

These data do not exactly answer the question proposed; but if tubercles always or more frequently exist in pleurisy of the right side, we should, *à priori*, anticipate more unfortunate terminations of the operation of paracentesis of the right than of the left side. My experience proves exactly the reverse, and may be expressed, if deduced from the above table, as follows:

Of 25 cases, 14 were of the right side, 11 of the left. Of the 14 of the right side, only one person is mentioned as having tubercles, and in that the pleurisy was cured and the pulmonary symptoms mitigated.

Of the 14 persons tapped in right side, 28.57 per cent. died ; 64.28 per cent. were cured, and 7.14 per cent. remained doubtful. Whereas, of the 11 cases of the left side, 45.45 per cent. died, 36.36 got well, 18.18 were doubtful.

In other words, twice as many have got well from tapping the right as the left; and only half as many have had doubtful results from operations on the right, as in those where the left side has been tapped.

Hereafter, if my cases are any criterion wherefrom to judge, I shall regard an operation on the right side as much more favorable than one on the left; which I can hardly think would be the case were all right side pleurisies tuberculous.

When shall we operate?—Experience teaches me to operate in every case, however recent or chronic may be the attack, provided there is permanent or occasional dyspnœa of a severe character, evidently due to the fluid. I have, of course, more hope of doing good where the disease has not been of too long duration; is uncomplicated with phthisis, or any other disease, and where, moreover, the amount of fluid seems directly the cause of the trouble. I also deem it best to operate in *any*, even latent cases, where the pleural cavity gets full of fluid; and if, after a reasonable amount of treatment, the fluid does not diminish.

Where shall we operate?—The point originally chosen by Dr. Wyman and myself, viz.: in a line let fall from the lower angle of the scapula, and between the 9th and 10th ribs, I deem the most appropriate point at which to make a puncture. I have, however, tapped under the axilla, or in the breast, where the case seemed to require it. In selecting the precise intercostal space, on the back, I usually choose one about an inch and a half higher than the line, on a level with the lowest point at which respiratory murmur can be heard in the healthy lung of the other pleural cavity.

I never wait until *pointing* commences; for then I am sure that pus will be found. If *pointing* without opening has commenced, I do not necessarily tap in that place, as recommended by the older surgeons but seek the most depending point in the chest. While thus desiring to operate before a *local* distension shows itself, I dislike or refuse to tap where there is contraction of the intercostal muscles; and I am certain of getting fluid only where there is distension or flattening of the same.

Objections to the operation.—One word on the objections to the operation: "We may puncture the lung." "We may let air into the pleura." "We may by our strong suction injure the lung." "The instrument often fails to operate." "The connecting tube between the pump and the trocar collapses, and thus checks the flow of liquid." "The liquid may be too thick, and can not be drawn through the small canula." "We may excite inflammation of the pleura." "The operation is useless, because non-tubercular cases will get well without; tubercular will die in spite of it," etc., etc.

One and all of these objections are to me, with the experience I have had, simply absurd. Let any man have *good* instruments, and manage them skillfully on proper cases, and he will agree to the truth of what I state.

The operation, like everything else in all the departments of human life, is imperfect. It can not cure all. But it has relieved many, and will continue to do so, if surgeons will use it; it has been the prominent cause of relief in many more, and will be so hereafter, if men will theorize less and act more. It has been the sole means of saving life, I am sure, in a few of my cases; and I know some patients have died within the last few years, in New England, as I believe, for want of it, under the care of others.

It is certainly innocuous, and gives so little pain, compared with the relief that it affords, that patients have begged for it to be repeated again and again, as a mere matter of relief. In my opinion it ought never again to be allowed to fall into disuse by the profession. regard any man who allows a patient to die of dyspnœa from pleuritic effusion, however great may be the complications with other diseases of head, chest, or abdomen, as in the dilemma of him who is either willfully neglectful of some of the means of relief or cure, now by experience proved to be always at hand, or ignorant of the simple and beautiful operation suggested by Dr. Wyman. To a certain extent, I deem my connection with the operation somewhat providential. I had seen, in the earlier years of my practice, men die with sudden dyspnœa, or, after months of obscure disease, die with one pleural cavity filled with serum, and not a particle of other disease; and finally, I have seen tubercular phthisis follow, after months of debility, from what was simple pleurisy at first.

Having no surgical tastes myself, shrinking from the simplest operations, and doing nothing of the kind save when compelled to do so, I at times urged surgeons to operate. They declined, and men died. Finally, in cases where I had control, I took the responsibility, and asked the surgeons to do the manual they were more accustomed to than I was. Their plan was incision and dissection down to the pleura, and a suppurating wound as a consequence—a long, painful operation. At last Dr. Wyman's instrument and method came to my notice. I seized upon them as those I had long sought for. As Dr. Wyman and I were the only believers in the operation, it devolved often upon me. The result is the experience which I have given above. And now, as I have often said, I would as readily puncture the chest as I would draw a tooth, or vaccinate a child.

Boston, Nov., 1862. —*Amer. Jour. of Med. Sciences.*

Rupture of Uterus.— Dr. L. R. Hoalmead records (*Chic. Med. Jour.*, Dec., 1862) a case of rupture of the uterus in a fifth labor, all the former ones having been severe and prolonged. Dr. Byford, who was called in, performed the Cæsarean operation and extracted placenta and child, both of which were found in the peritoneal cavity. It is not stated whether the child was living or dead. The patient died seven days after.

The Relations of Albuminuria to Pregnancy.

Being Remarks made before the New York Academy of Medicine, by George T. Elliot, Jr., M.D., Professor of Obstetrics, etc., in Bellevue Hospital Medical College, etc., etc.

In using the word albuminuria in its general signification, and considering it both as a symptom and as an exponent of the various morbid conditions in which that symptom may be present, it seems to me that its relations to pregnancy may be thus stated.

Pregnancy presents the great clinical peculiarities of being:

1st. A special excitor in very many cases of albuminuria which had not previously existed.

2d. Of materially developing these morbid conditions in many chronic cases in which they might otherwise have possibly remained latent for a much longer period, or in which they might have disappeared without such excitation; thus offering an inevitable increase of risk analogous to those which we seek to avoid when albuminuria is uncomplicated with this state.

3d. Albuminuria in pregnancy is not only liable to involve all the dangers associated with its existence in other conditions of the system, but, in addition, entails a special liability to some, as convulsions or mania.

4th. It may happen that the unfavorable influences of albuminuria, after remaining latent during pregnancy and labor, may only make themselves felt when it was hoped that the dangers of the puerperal state had passed.

5th. The complications of albuminuria may demand the consideration or prompt performance of all obstetrical operations, both during labor and before labor shall have commenced.

6th. Pregnancy presents the special grave peculiarity of exposing two lives to the dangers connected with the occurrence of these phenomena in one subject.

7th. Experience encourages us to hope that the continued careful study of this subject will enable us greatly to diminish the dangers which we know to be associated with these conditions of kidney.

The subject, therefore, is one of vital interest to the obstetrician, and it is a matter of just pride and congratulation to see the great advances which have been made in its study. There are few more striking illustrations of the progress of pathology than a comparison of the autopsies made in cases of puerperal convulsions, but fifteen years ago, and those of the present day.

The first question to be determined in investigating the relations of albuminuria to pregnancy is the frequency of its occurrence.

While engaged in the study of kiestiene, as a product of pregnancy, with my friend Dr. Henry Van Arsdale, specimens of urine from over one hundred and sixty pregnant women were carefully examined. Of these, one hundred and twelve specimens were carefully tested by daylight, with heat and nitric acid, in perfectly clean test tubes, for albumen, and but two presented that ingredient. These observations were made in 1852–3, and are recorded in the *New York Journal of Medicine*, in 1856.

Very few of those specimens were of the urina sanguinis, because, in my desire to avoid the risk of deception and disappointment, they were in the great majority of cases obtained from women who applied to me at the Lying-in Asylum, as Resident Physician, for tickets which would enable them to be attended in their labors by the District Physicians of the Asylum, and the specimens were mostly obtained during these visits.

In a letter which I recently had the pleasure of receiving from Dr. George Johnson, of London, in reference to a patient, he remarks of certain specimens, that "the urine brought for examination was passed after food and exercise, when, of course, it is not more likely to contain albumen than at any other time." I was not cognizant of this fact; but if it be as reliable as the other statements of this eminent observer, then the specimens of urine obtained in the Lying-in Asylum presented all the most favorable requisites for the detection of albumen, and, on looking back to them, both Dr. Van Arsdale and myself can testify to the fidelity and care with which the examinations were made. It is important to add, that but very few specimens were from the early months of pregnancy, as application was generally deferred until the pregnancy was far advanced.

Since the consideration of this topic has been assigned to me, my house physicians, Drs. Nealis and Mola, have procured thirty specimens of the urina sanguinis, in new bottles, from pregnant women, in the lying-in wards of Bellevue. Ten of these were given to Dr. Clark, ten to Prof. Austin Flint, Jr., and ten to Dr. W. H. Draper.

[The analysis afforded by these gentlemen exhibited four cases of albumen in the thirty specimens.]

While it is obvious that the particulars recorded of these 142 examinations present a slender contribution to the great mass of observations necessary for the appreciation of the true ratio in which albuminuria is liable to occur in pregnancy, it is also true that, for the elimination of all risks of error, observations should be very numerous in each individual case, because of the recognized fact that the albumen is liable to be absent for variable periods of time, even when the conditions with which it may be associated are fixed and incurable, and from the uncertain time when albuminuria may first complicate pregnancy. It is desirable also to know whether the season of the year or varying hygienic conditions influence its frequency. Still more desirable, if possible, is it to follow up those cases closely which present albuminuria, and learn whether the proportion of absolute recoveries be as complete as many have assumed; and whether multiparæ, who have been the subject of albuminuria in their first pregnancy, are as free from danger of its reappearance as is generally supposed.

Before leaving the subject of the frequency of albuminuria in pregnancy, it is very important to mention that no outward signs can be considered as proof of the absence of this product in puerperal women.

My memoranda offer me many examples of the entire absence of such physiognomical relations. Nor does it seem to me that such conditions, either where a previous history of œdema is given, or where no such symptoms have been observed, have any special relations to prognosis.

All the microscopic phenomena observed in these conditions of the kidney, from simple congestion to the most advanced disorganization, may be met with, and their recognition demands all the care, and involves all the difficulties signalized by the gentlemen who have preceded me. Nor, indeed, can they be sought for too carefully, as my cases present me with illustrations—

1st. Of cases where I have regretted that thorough microscopic examination had not warned me of the likelihood of more advanced disease than was suspected from the mere presence of albumen, and the attendant premonitory symptoms.

2d. Of cases wherein certain microscopic appearances, as blood corpuscles coëxisting in some, with pain on pressure over the kidney, have furnished important suggestions for treatment.

3d. Of cases in which, no albumen being present, the microscope alone has detected the evidences of advanced renal disease.

4th. Of cases wherein cursory examination having failed to present evidences of renal disease, the autopsy has disclosed conditions which a more thorough study would probably have recognized, and brought to bear on the prognosis.

5th. Of a case in which repeated examinations during the first six months having disclosed nothing, albuminuria and convulsions subsequently occurred, and the kidneys have not yet returned to health, although three years have elapsed.

Memoranda of the microscopic appearances observed in nine cases of convulsions wherein albumen also existed, show that blood corpuscles existed in six, four of whom were primiparæ, and two multiparæ. Casts were found in eight; oil globules were observed in four. The character of the casts is mentioned in four. In one they were slightly granular, with epithelial cells, and some oil globules. In one, quite granular, with fewer cells and oil globules; in two they were granular and waxy. It is interesting to note that in one of the latter cases blood drawn by us did not contain urea; that patient was a primipara, and did well.

Three of these patients died. In one an autopsy was obtained, and the kidneys were pronounced by Dr. Isaacs to be enlarged and congested, but not changed in structure, affording a very interesting relation to the examination of the urine by Professor Clark, who had found blood corpuscles, but neither casts nor oil globules.

In a case of pleuro-pneumonia and bronchitis occurring a day or two after a natural labor in a primipara, and proving fatal, three examinations of urine were made by Prof. A. Flint, Jr., with his accustomed care. No albumen was found in any of them. The first examination, however, gave a specific gravity of only 1011.370176, and the third examination enabled him to detect small granular casts. There was absolutely nothing in the appearance of this patient or the history of her labor to call attention to the urine; but the examinations were made at my instance, because I suspected that the respiratory diseases were due to or associated with renal disease. The post-mortem examination showed that the kidneys weighed ℥·vj. each. Capsules unadherent, stellate veins being markedly full. A portion of the kidney was examined by Prof. Clark, with the following result:

"A large amount of granular matter infiltrated into the intertubular substance, though the kidney does not exceed ℥ vj. in weight. Fibrous tissue abundant, with numerous newly formed fibres. A few of the malpighian bodies shrunken, their tufts diminished to one-half and one-fourth their natural size, and pale. The greater number of natural size or larger, and all these of uniform bright red color from congestion, and contrasting very strongly with the surrounding tissues. Capillary vessels themselves not visible; but the coloring matter of the blood seems to be diffused through the tufts. Cells of the tubes all in an unnatural condition, either granular or fatty, and many were both. The amount of oil in none excessive. Cells of the tufts were not fatty or granular."

In a case of bronchitis and œdema of the lung in a primipara after a natural labor, a specimen of urine insufficient in quantity, and in an imperfectly cleaned bottle, was sent to Dr. W. H. Draper for examination; and although he detected some albumen, and some appearances which might be due to the presence of fatty casts, he properly abstained from deciding any questions on that single specimen. He, however, found on examination of a portion of the kidney itself, which I sent him, that the degeneration was more advanced than in any which he had ever observed. "In the cortical portion tubuli were so filled with fat as to obscure, if not altogether to exclude the existence of epithelium. The intertubular structure also was full of oil globules. In the pyramidal portion the degeneration was less complete, but still considerable. Many of the tubes were distended with fatty matter, and many were entirely empty. Some exhibited the epithelial lining imperfectly, the cells being shrivelled and very fatty. The liver also was very fatty. In the uterus, fatty degeneration of the fibres had already commenced.

The autopsy, in one of my cases, presented appearances which always made me regret that the urine had not been examined microscopically. It was loaded with albumen.

The kidneys were examined by Drs. Isaacs and Clark, with the following result:

The autopsy was made in winter, twenty-seven hours after death.

Dr. Isaacs stated: "In the hottest weather of summer I have often made post-mortem examinations of subjects which had been dead nine or ten days, and wherein the organs were not as much advanced in putrefaction as in the present instance. On separating the capsule from the kidney, the cortical substance exhibited numerous elevations, as in the cirrhosed kidney, and the cortical substance was very much softened, and easily broken down on slight pressure, and gave the same sensation as the liver when this is cut into by the scalpel. On microscopic examination the kidneys were found in an advanced stage of Bright's disease; the malpighian bodies were of various sizes, some of them very small. The fibrous ring of the matrix surrounding them was very much thickened. The capillaries of the malpighian tufts contained numerous oil globules, as did also the minute arteries of the cortical substance. The tubes were generally, and in many instances entirely, denuded of their epitholial cells, many of which were disintegrated or resolved into granular matter. In the numerous specimens which I examined, I could not find anything like healthy structure in the cortical portion."

Dr. Clark corroborated the statements of Dr. Isaacs, and each separately expressed his opinion that the excessively rare degree of softening was probably due to some septic influence with which we are not familiar.

In this case the liver was fatty, the aorta atheromatous, and fat recognized under the microscope in the muscular tissue of the heart, but the fibres themselves had not degenerated.

In one of my cases where albuminuria and convulsions occurred in the fourteenth pregnancy, the microscope gave evidences of advanced Bright's disease in that pregnancy, and the patient died in her next pregnancy hemiplegic and comatose, the microscope having thus confirmed the previous diagnosis. This patient had been fully warned of her danger, but having consulted another practitioner during the intervals of her pregnancy, he examined one specimen of her urine, and from the simple fact that albumen was not present in that one, he reversed the unfavorable prognosis which had been deliberately given by Dr. Bolton and myself.

In some of the cases alluded to, thus far the coëxistence of fatty liver with fatty kidneys and heart has been established by microscopic examinations. Both my memoranda and my recollections of other cases in women, in males, and in children at the breast, teach me that this is by no means an unusual complication. On the contrary, when proven to exist in one organ, I am quite prepared to find that the microscope will show its existence in one or both of the others. Nor does such coëxistence of fatty degeneration prove unimportant in obstetric practice. I find the complication alluded to some years ago at different times, in some of my published cases, and the opinion expressed, that often what we are content to sum up in the emphatic word "shock"—that collapse and inability to rally, seen in some cases, where they would scarcely have been anticipated—might still more frequently be traced by an autopsy to the occurrence of these degenerations.

Neither my memoranda nor my memory recall to my mind more than one well-marked case of the large white kidney. The appearances of that on section are as clear in my mind as yesterday. I have always regretted that no microscopic examination was made. The history of the case presented also many points of extreme interest, which may thus be very briefly summed up.

She was a primapara; aged 28; strongly built; who came under my observation anasarcous, exhausted, suffering from diarrhœa, with her urine loaded with albumen. Diarrhœa controlled. Stimulants given, and when rallied, ℥ vj. of blood were taken from the lumbar region with cups. She had four convulsions, with an interval of consciousness between the second and third. I dilated her uterus with the douche, and delivered one still-born child with forceps, and a second living one by version. Warmth, salines, and diaphoretics then made up the treatment. She had a good getting-up, and in ten days' time was sitting by the stove, bright and happy. On the next day she had a convulsion, and never regained consciousness, though she lived for two or three days with scarcely any secretion of urine. The post-mortem was witnessed by Drs. Isaacs and Gouley.

I do not remember having met with the small contracted kidney in the autopsies of any puerperal women.

In one of my cases the autopsy of a young primipara — whose bedside I reached just after her death in puerperal convulsions — disclosed a condition of kidneys which has never been brought under my observation at any other time. She had died undelivered, and I removed a dead child by the Cæsarean section, and obtained permission to examine the uterus and kidneys alone. On inspection these kidneys were found to be about the same size and weight, but on section, one exhibited evident appearances of disease, while the other seemed healthy. The difference between them was noticed by Dr. Foster Swift, and others, and they were shown at a clinic which I then held in the College of Physicians and Surgeons. In order to test the matter still further, I sent one to Dr. Isaacs and the other to Dr. Gouley, and the report from each of these gentlemen confirmed the character of the appearances observed by the naked eye. Unfortunately these reports have not been preserved ; and unfortunately I had no opportunity of examining that woman's body to determine the mode of death. The case is offered as a solitary exception to the law of parallelism, correctly stated by Prof. Flint, and as possibly explanatory in some rare cases of recovery or duration of life despite the evidences of continued advanced disease in the urine. How fortunate for us, indeed, would it be, could one kidney, remaining healthy, do the increased labor devolving on it from the disease of its fellow.

Before leaving the question connected with the pathology of this disease, I desire to express my conviction that the recurrence of albuminuria in successive pregnancies will be found to be more frequent than is generally admitted, and that the risks are greater in proportion than in primiparæ, in consequence of the greater age and greater probability of being associated with advanced renal disease.

My memoranda give me twelve cases of albuminuria in multiparæ. Of these four died during or within a few days subsequent to labor; two are now paralysed, and their fate not determined ; one was safely carried through by premature labor, induced in July last, but the urine continues to present the evidences of albuminuria. In that case albumen, casts, or low specific gravity have been noticed at intervals, for three years, since the occurrence of albuminuria and puerperal convulsions in her first confinement. In one whom I saw in her first labor, in consultation with Dr. Warner, when suffering from violent puerperal convulsions, albumen reappeared in the course of the second pregnancy, and disappeared before its close by abstinence from meat and the use of Rochelle salts, and she did well in and subsequently (as yet) to her confinement. Of the four remaining cases set down as recoveries, three have passed from under my observation, but the fate of the fourth was detailed to me a day or two since, by my friend Dr. Bishop. In her case he detected albumen subsequently to her labor, and she died two years afterwards anasarcous, with albuminuria and phthisis.

Collins' cases only furnish one of convulsions in multiparæ. That woman had convulsions in her first labor, and died after the second from metro-peritonitis, dependent on laceration of vagina. Hardy and McClintock give three cases of convulsions in multiparæ and two of these had convulsions in their first confinement. Of the three cases two recovered. One, however, of those who had suffered from convulsions in her first confinement, in addition to convulsions in her second, suffered from partial paralysis of left side of face and right arm, followed by mania, and then a low form of religious melancholy, which lasted six months, and required confinement in an asylum. She is reported as having recovered.

In analysing the cases of Johnston and Sinclair, I find fifteen cases of convulsions in multiparæ. Of these four mothers died. In investigating the character of the cases, it appears that of the eleven mothers who recovered, two evidently had hysterical convulsions, and one very probably, while a third presents some symptoms of possible hysteria. Including this last case, however, there remain eight, five of whom presented the favorable circumstances of convulsions coming on after labor only; while of the three who were convulsed before labor, two were only two hours in labor, and one six hours. Thus an analysis of these cases in the absence of full reports of the urine, shows that in the whole number an average mortality occurred, while the very remarkably favorable contingencies of hysteria, occurrence after labor, and very rapid labor, blessed the eleven cases which did well. Johnston and Sinclair's cases also had the benefit of anæsthesia. It is interesting to note, that in but two cases are the previous labors referred to. In one they had been natural, and in one convulsions had occurred, and this patient died from granular kidney.

Of the five reported cases of convulsions recurring in multiparæ by Samuel Merriman, two died. Lee gives seven cases of convulsions in multiparæ, of whom one died. Of the recoveries one had evidently hysterical convulsions recurring in each labor after birth. In one there was no eclampsia, as the extremities were not convulsed. Of the remaining five cases of true eclampsia, the one that died is stated to have had convulsions in her first labor, and to have died three months after her second, with tubercles in her lungs and serum in the ventricles. At that time Dr. Lee had no knowledge of the present received pathology of puerperal eclampsia.

Mad. La Chapelle records three cases of eclampsia in multiparæ, of whom two died.

I believe that paralysis will be found more frequently in multiparæ than in primiparæ. It has certainly been so in my experience. When it has occurred under my observation in primiparæ, it has been fatal, excepting in one young lady who came under my care some years ago, almost blind. She had suffered puerperal convulsions, paralysis, and blindness from the presence of a clot. Time and absorption relieved the paralysis and the blindness to a sufficient extent to enable her to get about, and further improvement is hoped for.

The probabilities of albuminuria being more dangerous in them are strengthened, in my judgment, by the frequency of paralysis, in all probability caused by the fatty degeneration of the vessels of the brain, associated as that condition has been in some cases under my observation with fatty kidneys and liver.

In conclusion I may say that, gratifying as is our advance in the pathology of this subject, I believe that the next ten years will be required to settle the statistical questions involved, and I have no doubt of a diminished ratio of mortality from palliative and prophylactic treatment.

Among the results of albuminuria in pregnancy, there is probably no one more intimately related, more frequent, or more appalling than puerperal convulsions. I have memoranda of thirty-two cases.

In twenty-nine of these the conditions of the urine were noted. In twenty-six albumen was found.

Of three cases in which no albumen was found, two examinations of the urine were made before labor without result, in one primipara. The convulsions occurred during and subsequent to labor. Chloroform, wet cups to the temples, and forceps were used. Both mother and child recovered. An examination of the urine made some two months after the labor — the only other examination made — revealed a specific gravity of only 1009. It is very much more likely that more thorough and frequent search would have detected albumen in that case.

A second case came under my observation only after her delivery by craniotomy. She was a peripara, who also did well, and the examinations were not frequently repeated.

The third was an extremely interesting case of general convulsions in a multipara, unattended with albuminuria or loss of consciousness, and referable distinctly to spinal irritation. The mother and child did well.

Indeed, it is my conviction that *true puerperal eclampsia* is always associated with the disturbances of the kidney considered in this debate.

While I have frequently met with albuminuria at the time of labor and before labor, when no convulsions have occurred, my cases, which I have analysed for this paper, present but two belonging to this class.

In one of these, a primipara, the urine is described as becoming almost solid by heat and nitric acid. That patient died after delivery, by forceps, of a living child. An absolutely rigid os had resisted the douche, and was previously incised. She had no convulsions; probably they were warded off by treatment. Certainly she had amaurotic symptoms, disturbances of hearing, piteous, uncontrollable restlessness and agitations, and the post-mortem has been alluded to in these remarks.

In the other the urine was noted as densely albuminous, and the patient had headache, saw sparks and flashes of light before the eyes, and complained of a very peculiar, distressing, nervous tremulous feeling. In her case there was also pain on pressure over the right kidney. Under these circumstances, I dilated the os with the douche, and delivered with the forceps, and both did well. Chloroform was also used in these two cases.

In thirty-two cases the fate of mother and child was noted. Of the mothers, twenty-three recovered, and nine died. The fate of the child was noted in twenty-nine cases, of which seventeen were born alive, and twelve died. Of this number of deaths two were premature children, and one owed its death to pelvic deformity of the mother, and craniotomy. Of those born living, two died within a week, one after two days, and the other after a week. In my opinion the fate of the last-mentioned is due to imperfect nutrition, and not to the influences of the labor. In the other case I did not think the child would live so long.

In the treatment of puerperal eclampsia, it is not necessary for me to repeat the views which I had the honor to offer to the Academy on a recent occasion, regarding the use of chloroform. They have undergone no change since that time. As a prophylactic of anticipated convulsions, both in cases where they have not as yet appeared, and where we seek to prevent their recurrence, it is in my judgment invaluable.

Perhaps there is no one question more intimately connected with the general treatment of puerperal eclampsia than bloodletting. My notes state that venesection was resorted to in eleven cases, of which eight recovered and three died.

Local bloodletting (by cups in eleven cases) was employed in eight cases, of which six recovered and two died.

In contemplating venesection from my present point of view it is very evident that it has been steadily losing favor with me for some years. The more I study the pathology of these diseases, their subsequent tendency to anæmia, even to death by syncope, the more I recognize the effect of chloroform in quieting the capillary and other circulation in these cases, and in preventing renewed congestion by warding off convulsions, the less necessary does the remedy seem to me, notwithstanding the favorable statistics represented above. I dissent from the positive views on this subject recently expressed in the *London Medical Times and Gazette*, by that high and respected authority, Dr. Ramsbotham, and regret that the remedy was resorted to in some of my cases. Indeed, for several years venesection has not been resorted to by me. Yet I do not wish to say that I may not recommend it in a certain class of very sthenic cases. It is certain that these views are not influenced by any difference in the type of convulsions observed here and in Great Britain, so far as the Hospital cases are concerned, for personal observation as well as the well known peculiar cosmopolitan character of this metropolis witness to the contrary. It is also my belief, that the tendencies of my practice are rather to diminish alike the frequency and the amount of local bloodletting in these cases. Perhaps those cases in which the tenderness over the kidney with blood exudation or scanty urine occurs, may always be shown to be benefitted by cupping, though even in one of these occurring in a robust primipara, death occurred a few days after labor by syncope. The tendencies to cerebral extravasations are shown to be infrequent, by no means more certainly than by an analysis of the autopsies made before recognition of the pathology of true puerperal convulsions, when the brain was expected to elucidate the cause.

In cathartics, and especially the salines, steadily used, so as not, however, to weaken the patient, I have much confidence both as prophylactics, and as aiding to remove the results of simple stasis of the kidney, though I have long been very chary of calomel; nor do I at all object to diuretics, most particularly after delivery, when in so many cases you can see the beneficial effects from a natural and copious eliminative diuresis. But the diuretics should not be of the more stimulating class, and should be preceded by cupping, when renal congestion is proved or believed to exist.

Prolonged warm bathing as a prophylactic or subsequent treatment, abstinence from meat and malt liquors (in those able to dispense with them), with warm clothing, form part of my general recommendations, and I look forward with great hope to the more general use of Turkish or vapor-baths as a most valuable agent; as it is, bathing or the hot-air bath are the diaphoretics which I prefer. It would be very interesting to know how far tendencies to Bright's disease might be diminished in communities where such baths are generally used. Iron and tonics are pre-eminently necessary in the after treatment of many cases.

In my judgment, the prompt termination of the labor, when convulsions occur or are clearly foreshadowed, offers the best chance for mother and child. But while in many of these cases operative measures are eminently simple, and should be within the reach of all, there are many others in which only the expert should feel warranted to interfere, as he alone can know how free from risk the given operation may be in his hands. Among the many valuable results of anæsthesia there is no one more satisfactory than the fact that we can allow a patient to sleep calmly through a period of time which we would otherwise be very loth to allow, watching meanwhile the fœtal heart, and guarding both the lives intrusted to our care.

In those cases where true puerperal eclampsia occurs at term, and yet before labor has commenced, I approve of watching opportunity for bringing on the labor. The sponge tent, where great restlessness or great debility exist, has been my favorite remedy, though Barnes's method now seems superior; but, wherever possible, Kiwisch's douche is my especial favorite, and I could multiply instances of its delightful results. But the stream must be steadily thrown *against and within* the os uteri, or it will not prove effectual. These remedies are equally valuable where labor co-exists with an undilatable os. It may have been a coincidence, but in the only three cases in which I have had to recommend incision of the cervix, two were terrible cases of fatal albuminuria, in one of which eclampsia occurred. One was proved to be utterly incurable by the autopsy, and the other in all probability belonged to the same category. The principal questions of treatment remaining in albuminuria (as I have no experience with the agents recommended for the special relief of blood-poisoning) are the considerations of premature labor and abortion. No cases for the latter decision have come before me, and I waive it now, though recorded cases of safety to a mother, with chronic albuminuria, from successive miscarriages, are suggestive of the method; but it seems to me that premature labor demands renewed and careful attention. Excluding those cases just considered, where the term of pregnancy is reached, and the mere induction of the phenomena at a period when the ovum is ripe is involved, it appears to me that the induction of *real* premature labor is justifiable undoubtedly, and advisable probably in multiparæ where chronic albuminuria exists, or has shed its baneful influences over the previous labor; and most especially when, in despite of our best prophylactic treatment, the increasing albumen, lower specific gravity, diminished urea in the urine, advance of microscopic phenomena, or those disturbances of the nervous system now so well recognised as often the first mutterings of the storm, one or all cast their weight into the scale.

Among the great questions of pathology not yet settled, is the time which may be needed to change many of these kidney diseases from the form yet compatible with recovery to those fatal to life. Certainly it seems to me that no attentive student of these phenomena can consider without apprehension the duration of pregnancy as an element of time and danger in the case which I have just sketched. For the mother the question is already settled in my mind. Personal familiarity with the induction of premature labor in these and other cases has convinced me both of its comparative harmlessness and of its advantages to the mother; but the risks to the child require a further collection of facts for the final decision of the question.

Narcotics have always been used very sparingly by me in these cases, having given the preference to the use of anæsthetics in severe cases. But where the restlessness, insomnia, or pain, require relief, I use them cautiously, codéine or McMunn's Elixir being my choice. I have taken advantage of a hint from Dr. Graves, and used an anodyne under the pretense of an enema, and have resorted to hypodermic injection.

I have never used the mydriatics.

I have classed puerperal mania among the complications of albuminuria, but my cases do not afford me any illustrations of frequency which can at all compare with those in eclampsia.

My notes present me ten cases of puerperal mania, all occurring in primiparæ, in but one of which albumen was detected. But one of these proved fatal, and in that case there was neither albuminuria nor low specific gravity. Autopsy refused. Two other cases are noted as of a bad type, one being sent to the Bloomingdale Asylum; and in a third case the strait-jacket had to be used.

My memory recalls also a case of chorea in a young primipara, occurring during lactation. All that she required was to take iron and stop nursing. She had no evidence of other trouble.

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Dislocation of the Left Shoulder. reduced by Manipulation, without Anæsthetics or other Remedies.—On the morning of October 9th, Dr. Chas. H. Pile, Assist.-Surgeon U. S. Navy, was called to see a sailor suffering from an injury of the left shoulder, produced by a fall on deck. On examining the injured part, he discovered a luxation of the humerus forward, the head of the bone forming a prominent tumor under the belly of the pectoralis major muscle; the acromion process of the scapula was prominent and well defined. He immediately proceeded to reduction. He seated the patient on a low stool, flexed the forearm on the arm, elevated the arm at an angle of 45° with the body, then rotating the head of the humerus by turning the arm backwards as far as possible, and afterwards suddenly reversing the motion on carrying the injured extremity across the chest towards the sound side, when the head of the bone slipped into the glenoid cavity with a slight noise. This process for reducing dislocations of the shoulder was taught him by his old friend and preceptor, Prof. H. H. Smith, of Philadelphia.

The advantage it possesses over the old method is very manifest, since instead of requiring a vast expense of muscular power on the part of the surgeon, it is nearly all transferred to the muscles of the patient. In flexing the forearm on the arm, the flexor muscles are relaxed; by elevating and rotating the head of the humerus, it is dislodged from the neck of the scapula, and gradually forced upon the edge of the glenoid cavity, when the supra-spinatus, deltoid, and infra-spinatus muscles quickly draw it into its proper place.—*Amer. Journ. of Med. Sciences.*

Anæsthesia caused by Diseases of the Lungs.—M. Bouchut long ago remarked the fact, that the approach of asphyxia, in the latter stages of croup, brought with it a condition of lowered, and finally of extinguished sensibility. He now produces examples of other diseases, to show that the law is a general one, that asphyxia is always accompanied, *pari passu*, by anæsthesia; and this anæsthesia is quite independent of any diminution of consciousness. The most interesting of his cases is that of a young man, a student, who was attacked with a most profuse and suffocating hæmoptysis. During several hours he was in a condition of extreme asphyxia, and although his intellect remained clear, he had complete anæsthesia, and curiously enough, even an erection of the penis and discharge of semen such as frequently occur in persons who are hanged. The other examples cited, of anæsthesia occurring in the course of respiratory affections, are cases of croup, capillary bronchitis, etc.—*London Med. Rev.*, Oct., 1862, from *Gazette des Hôpitaux.*

THE

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ARTICLE I.

The Doctrine of Thrombosis and Embolia.

[Part I. of a paper read before the Cincinnati Academy of Medicine.]

BY D. S. GANS, M.D., CINCINNATI.

MR. PRESIDENT AND MEMBERS OF THE ACADEMY:

I appear before you with a paper which, after I have read it, you may say does not contain any thing original of my own. I freely confess to this fact. But original ideas are scarce, and those who possess them must demonstrate them by long investigations and experiments. These, particularly the first, can only be made by frequent post-mortem examinations and hospital practice; and this being almost out of my reach, I have thought it acceptable to you to read a paper on the "Doctrine of Thrombosis and Embolia," which has excited the greatest interest of the profession of Europe and this country.

Except single cases of thrombosis reported in the various journals of Europe, little, at least in the shape of comprehensive essays, having been written there upon it, and little or nothing in this country, increased my belief in the acceptability of such a paper. For this same reason and the very great field which the subject embraces, the intimate relation which it has with the question of metastasis, phlebitis, pyemia, etc., makes it impossible for me, at least in a simple paper, expected to be written in a brief and condensed form, to enter upon all these topics; much less will it be possible for me to exhaust the subject in all its bearings, and I fear, therefore, that you will find this paper in the end but too deficient. But I trust in your indulgence, much more so as it is my principal object to direct your particular attention to it, especially those of you and others who have charge of hospitals where autopsies may be made and true observation be possible.

PART I.—THROMBOSIS.

Historical Sketch.—The fact that vessels become obstructed so as to cause serious trouble there or in the organs to which they lead, is not an entire modern observation. Already, Galen directed attention to death by suffocation in diseases of the heart in consequence of obstruction of the pulmonary arteries ; but nobody then paid any attention to this phenomenon. Until in the seventeenth century Vesal, Lancisi, Bartoletti and Bonet wrote about the frequent combination of so-called polypus of the heart with gangrene of the extremities. In the eighteenth century Boerhave, Van Swieten and Morgagni showed the connection of certain (embolic) apoplexies with polypus formed in the heart. In the beginning of the nineteenth century, the doctrine of embolia was pushed into the background by Cruveilhier's doctrine of phlebitis and arteritis, who looked upon every clot found in vessels as the product of inflammation. Alibert and V. Francois in 1828 came forward with some observations in favor of the embolic doctrine, but without producing much impression upon their contemporaries. Hasse in 1846 deduced a case of occlusion of the cerebral arteries, with subsequent softening of the brain, from embolia ; and Pioch published in 1847 a case in which he thought embolia was very probable. But it was reserved for Virchow, who was enabled by numerous experiments upon animals and minute examinations of bodies which had died of symptoms indicating thrombosis and embolia, to systemize this doctrine upon a firm basis and place it beyond all doubt.

Since then, cases of thrombosis and embolia in considerable numbers have been observed and proven by post-mortem examinations, by Addison, Rees, Farne, Bristowe, S. W. Oglo, Tenner, Tudichum, Oppolzer, L. Buhl, H. Lebert, Simpson, Lancereaux, E. Fritz, A. Laton and others ; but still a good deal is wanting to perfect this doctrine, principally in reference to the cause of the coagulation of the blood within the blood vessels, and the mechanism of the secondary processes.

THEORIES OF THE COAGULATION OF THE BLOOD.

There are prevailing very different views about the cause of the coagulation. I will give here only a few of the principal theories in as brief a manner as possible, without going into the details of argument, intending after a brief exposition of these theories to give but what are facts, following Virchow in his doctrine.

Richardson, taking ammonium to be the solving medium for the fibrin, believes the escape of the same to be the cause of the coagulation of the blood. He has certainly the merit of having proven that the blood and the expired air contain ammonium in a larger quantity than was believed, and in reference to therapeutics, the property of the ammonium to liquify coagulated blood may serve to dissolve coagulation happening in the system, and to explain in a physiologico-chemical manner the known resorbent and antiphlogistic effect of certain preparations of ammonium. But he has by this not explained the phenomena of the coagulation.

Another theory is that of Dr. Bruecke, namely: The coagulation has to consist in an altered position of the atoms, being prevented in normal life by a certain influence, as nothing becomes added or lost at the moment of the coagulation; fibrin and albumen being chemically equally composed. And as that influence is not contained in the temperature, nor in the motion of the blood, nor in the exclusion of the oxygen of the atmosphere, it could depend upon the blood corpuscles themselves only, or upon the inner wall of the vessels. If this influence becomes disturbed by certain morbid affections, then coagulation will take place. This opinion is based upon the following: 1. That the coagulation within the vessel proceeds always from the surface toward the centre. 2. That the blood of dogs remains fluid in the heart and vessels from five to fourteen hours after death; whilst it coagulates very fast when taken out. 3. That the blood in the excised vessels of a dog just killed remains fluid at least half an hour; but, injected into the veins of a dog killed several hours previous, does not remain fluid even a quarter of an hour. 4. That air in the living heart does not produce coagulation. 5. That coagulation takes place a great deal sooner in animals with warm blood, in which the tissues after death lose sooner their vital property, than in cold blooded. 6. That, finally, coagulation takes place in cases where the circulation is not impeded, but the walls of the vessel are diseased or necrotic. If stasis of blood takes place through ligatures, foreign bodies or external pressure, it does not coagulate in consequence of the stasis alone, but principally on account of the want of renewal of the contact with the walls. But Bruecke does not say or explain what this peculiar property of the walls is. Several facts speak also against this theory. Not in every case of diseased vessels does coagulation occur, but only in such in which the circulation is wholly or considerably retarded;

for instance, in aneurismatic sacs, or in the periferic arteries in gangrena senilis. Furthermore, we could not explain by this theory the formation of the marantic thrombi at the valves of the crural veins, which Virchow has positively proven to be the consequence of the much retarded circulation and the valvular space, in which the blood stagnates. Again, the fact that foreign bodies introduced into the blood cause coagulation around themselves, and finally old wall-stationary thrombi are frequently found with fresh black nucleus, a proof that the blood has yet circulated through the stationary fibrin ring without coagulating, although it could not have come in contact with the wall of the vessel.

But all these theories and others do not give a satisfactory explanation to the question. Even Virchow himself, the founder of the doctrine of thrombosis, and who has as already said made the most numerous experiments, does not pretend to have arrived at a satisfactory solution. According to him the fibrin is not preformed in solution in the circulating blood, but is produced out of the albuminous contents of the blood by the addition of gases from the atmospheric air, by oxydation. He does not believe in a spontaneous coagulation caused by an abnormal composition of the blood alone, by a state of superfibrination, inopexia, according to Julius Vagel, neither by the presence of pus in the blood. All cachexies and marasmus are associated with a reduction of the red corpuscles (oligocythæmia), and an increase of the fibrin, and that this increase of the fibrin explains the greater disposition to coagulation. How this increase of fibrin, which is not even constant, is to be explained, he does not pretend to say. It is remarkable, however, that it is found together with an increase of the colorless blood corpuscles. For the genesis of the marantic thrombosis, which will be described in a later part of this essay, the fact is important, that in all conditions favoring that kind of thrombosis, a considerable weakness of the cardiac and pulmonary movement is present, in consequence of which a considerable retardation of the circulation is occasioned. If a local obstacle becomes added to this, it will easily be comprehended that the colorless corpuscles agglomorate quickly, and it is a fact that finally a real coagulation of the fibrin takes place. Virchow comes, therefore, to the conclusion that *retardation or complete stasis of the circulation seems to be the principal, relative or absolute increase of the fibrin in the blood, may this be general or local, the second factor of the coagulation of the blood within the vessels.*

But having laid down the principle that fibrin is not preformed in the blood, that it does not exist there as such, but that the real coagulable fibrin is formed only by the action of oxygen of the air out of the fibrinogenous, non-coagulable substance, the question naturally arises, what is it that causes the metamorphosis of the fibrinogenous substance in the static or retarded blood current? The oxygen necessary to the formation of the coagulable fibrin must enter either from outside, or it already preëxists in the blood. The following eventualities may in that respect become possible:

1. The oxygen may enter from outside into the blood.

(*a.*) A division of continuity of the wall of the vessels exists, by which an entrance of the air is made possible; for instance, by venesection, amputation, trepanation, extirpation of tumors, etc. (*b.*) Oxygenized fluids are resorbed from exposed surface; for instance, surfaces of wounds and ulcers, umbilicus, uterus, lung, ear, etc.

2. The oxygen may become liberated in the blood in which it preexisted. It need here only to be considered that oxygen, which was bound to other portions of the blood, is transferred to the fibrinogenous substance, changing this into fibrin. The red corpuscles, being the true carrier of the oxygen, have to undergo such an alteration, incapacitating them to hold the oxygen.

I have yet to give one and the newest theory of the coagulation of the fibrin by Alexander Schmidt, of Dorpat (*Compt. Rend.*, LIII., p. 976, etc., 1861,) Bruecke's idea that the walls of the vessels possess in the normal state the faculty of preventing the coagulation of the blood, brought Schmidt to the supposition that the agent producing the coagulation was contained in the coagulating substance itself, and that the walls of the vessels exert their influence of preventing coagulation upon this agent. As the spontaneous coagulating fluids (blood, chylus, lymph, pus) distinguish themselves from others by their contents of cells, the proposition did not seem untenable, that these cells contain or produce a substance which may cause the coagulation of the fibrin. With this view two facts agree: the kind of coagulation of the blood, and the coagulation of chyle and pus, are as different as these fluids are in respect to their cells; further, it is said that chyle and lymph become only coagulable after their passage through the glands, whilst it is certain that they (the fluids) only contain cells beyond the glands. Consequently, if the production of the coagulation depended upon the presence of cells, and the kind of the coagulation upon the kind of cells, then chyle and lymph ought to appear at the coagulation like blood, exposing them to the same conditions to which the blood is under all circumstances exposed,—when, for instance, chyle and lymph is coagulated by the addition or mixture with blood. Experiments really proved the correctness of the deductions, and after making very numerous experiments he comes to the following conclusions:

1. The coagulation of albuminous fluids depends upon the combination of a substance belonging to the cell contents (fibrinoplastic) with a substance peculiar to the intercellular fluid (fibrinogenous); the new body is the fibrin. The fibrinoplastic substance is in each case the albuminous part of the contents of the red blood corpuscles, even in the case when the blood cells are not implicated immediately in the coagulation. As such excitors of coagulation the author of this theory recognizes, besides the colored blood cells and the hæmatacrystallin (the chyle and the lymph) pus, the tissue of the cornea, the umbilical vessels, the lens. Equal with these cell-containing substances are fluids into which the cell contents have entered, (in which it can be shown,) the blood serum, the fluids of the eye, the saliva, the synovia; ineffectual are the albumen of eggs, tendinous tissue and cartilage.

2. The property to give off a part of their albuminous substance in the coagulated condition do not possess the spontaneous coagulating fluids (blood, chyle, lymph, pus and certain exudations) alone, but also almost all serous fluids; they coagulate by the addition of blood or any other fibrinoplastic fluid. An exception from this exhibits the albumen of eggs (which lacks the fibrinoplastic property), and the (fibrinoplastic) fluids of the eye, the synovia from uninflamed joints.

COMPOSITION OF THE THROMBUS.

The fresh thrombus varies from the simple blood coagulum already by its composition, and, principally—

1. *By a Plainer Lamellated Formation.*—Whilst a simple coagulation, formed for instance in or after death, is usually composed like the coagulum outside the body as in venesection; whilst it shows a homogeneous cruor and above this a single crusta pleuritica, in a single, more seldom manifold layer, such a condition exists in the thrombus but in the first formation, disappearing as it grows larger. As new layers of coagula place themselves gradually around the first coagulation, the alternation of cruor and crusta pleuritica repeats itself.

2. *By a Greater Content of Fibrin.*—Considering the manifold repetitions of the crusta pleuritica as above indicated, no doubt can exist that we have in the thrombus more fibrin than in an equal mass of other blood. With this corresponds the lighter color, the greater toughness and dryness of the clots in comparison with fresh coagula.

3. *By a Greater Richness of Colorless Blood Corpuscles.*—The dif-

ference in this respect between the thrombi and the fresh coagula happening at the same time in the cadaver, induced Gulliver, Lebert and others to believe that pus corpuscles were contained in the clots already from the beginning. But Virchow became more and more convinced that what appeared as pus corpuscles were colorless ones, which as such were contained in the blood, separating themselves with the fibrin at the same time.

These peculiarities of the clots are of great significance for their later history. They are also of special value for the anatomical diagnosis, and besides furnish explanations about the formation of the clots themselves, particularly as the peculiarities present themselves nowhere as plainly as in the spontaneous coagulation in the continuity of the vessels, whilst they are certainly the least visible where the continuity is interrupted, as in venesection, wounds, amputations, etc. The great accumulation of colorless blood corpuscles is clearly connected with the retardation of the circulation, for if we really do find an increase of colorless elements in the blood in many of those patients in whom spontaneous thrombosis occur, for instance, puerpura, consumption, etc., nevertheless, a difference shows itself also in these between the blood generally and the clots.

METAMORPHOSES OF THE THROMBUS.

The thrombi may pass through various metamorphoses. Either they become organized, or enter into disintegration or softening.

1. *Complete Organization.*—By a change into cellular or connective tissue the thrombus becomes not only organized, but also vascularized. How soon this may take place is not certain. Virchow found in his experiments on animals that this had happened within four weeks. How this organization and in what manner it takes place, admits of different explanations. I need not enter here into these various explanations, as it suffices for our object to state that the organization of the thrombus is a fact beyond question and admitted by all. The process seems to be similar to the regeneration of divided tendons, where the organization takes place, according to the experience of Piragoff, Thierfelder and others, within the exudation.

2. Another possible metamorphosis is the one into disorganization or detritus formation, and that in a two-fold manner: in simple, puriform softening, or in putrid liquefaction. The first, (softening of the coagula, of which the puriform liquefaction seems to be the end,) however, seems to be the first stage of the latter, begins always in the oldest parts of the clots and in the softest portions of these. It is,

therefore, not constantly in the central parts from whence the softening proceeds, but mostly from the nucleus. These oldest inner layers do not enter immediately equally into softening, forming a single central cavity, but there occurs a kind of chapped condition, the connection between the different concentric layers becoming loosened, the portions rich of cruor become softened first, whilst those containing the crusta pleuritica hold longer together. It appears, therefore, at first as if the softer pulpous mass had been infiltrated into and between the compounds of the clots, and this appearance has no doubt given rise to the theory of Cruveilhier of the imbibition of pus into the clots. Then comes a time when also the more firm, fibrinous layers become softened and break down. In this manner an inner cavity is formed, in which is contained, besides the more homogeneous soft material, grumous crumbling or mushy particles. These become also loosened and softened but by degrees, and the whole inner mass becomes homogeneous.

The color of this detritus is very different, according to the contents of the original clot. Where a great many red corpuscles existed, or layers rich in cruor have become softened, the color remains often for a long time dark red, red-brown, red-black or rose-colored; where more fibrinous masses preexisted, the softened mass has a lighter color, and assumes later a whiter, grayish-white, or yellow-white appearance. If many colorless corpuscles existed, the mass early appears already light, marrow-like, and becoming finally completely pus-like. The consistence of the melting masses is usually at first more thready and slimy, and later it becomes more homogeneous, cream-like, dividing easily in water.

The different constituents of the clot undergo the following alterations.

The *red blood corpuscles* remain unaltered generally a long time. The first alteration perceived is a certain irregularity, a distorted, rough, or indented appearance. Gradually they become paler, giving off their coloring matter, the membrane being yet entire, and attaching itself gradually to the surrounding parts. The color of the coagulum becomes by this more equal. In portions which lay more isolated and rich in cruor, the color remains very dark, becoming only somewhat brown; in the other, however, the coloring matter seems to disappear gradually by resorption or direct metamorphosis. At least, the clots become brighter, pale red, marrow-like, afterwards yellowish and whitish.

The *colorless blood corpuscles* present principally three changes.

(*a.*) They enter into the fatty metamorphosis and are changed by and by into granules, then disintegrating, furnishing free fat granules.

(*b.*) They become atrophied. The contents become then lighter, the corpuscle paler and smaller, the membrane finer, the nucleus smaller, single but few fat granules appear within the cell content, and finally the nucleus disappears.

(*c.*) They are for a longer time preserved, and enter into divisions of the nucleus.

The *fibrin* passes through a series of changes leading to greater brittleness and mellowness. It loses principally its fibrillated condition; the cohesion between the fibrin particles gives way, and the larger fragments and pieces dividing at last into fine granules. These form by far the greatest portion of the softening mass, and they have to be distinguished from the small granules growing out of the disintegration of the red corpuscles and from those of the division of the nuclei. These granules are not the only and last product of the softening of the fibrin. Already at an early period a coherent mucous liquid is found; later, a thin, albumen-like mass, which can not be attributed to preëxisting serum, the clots being before generally very dry. The softening of the fibrin proceeds like the inner softening of tuberculous masses, and ends like these by the production of albuminous mushy or liquid masses.

The *putrid liquefaction* of the thrombi happens very frequently by direct communication with ischorous putrid wounds or ulcerating surfaces; therefore, principally in the unfavorable progress of amputations, in inner or external gangrene, for instance, gangrene of the lungs or ischorous caries. In that case the whole character of the softening masses changes. The cruor becomes quickly and peculiarly ill colored, dirty grey or yellow, greenish black, brown or slate colored. The membrane of the veins partake of this coloring, and even the surrounding tissue shows, at least in the cadaver, extensive putrid imbibition.

VARIOUS FORMS OF THROMBOSIS.

(*a.*) *The Marantic Thrombosis.*—This is that form which was formerly designated as spontaneous, rheumatic or metastatic phlebitis, and which is not only of much practical importance on account of its frequency, but also on account of its consequences, namely, the partial painful œdema (phlegmasia alba dolens) and the hæmorrhagic effusions.

This form is found in the train of many diseases connected with marasmus. It is particularly common in the course of chronic cachexia, phthisis, cancer, during protracted bed of sickness, hence in surgical cases (fractures, necrosis, ulceration), in paralysis, as also during the convalescence of febrile diseases, principally typhus and the protracted puerperal diseases. These are diseases which are associated with a general reduction of the fat and muscles. But the most depend upon the state of the action of the heart, for always where the force of the heart is weakened, there exists a disposition to partial stagnations, particularly in the venous blood. There exists also sometimes an organic alteration of the heart, principally a certain degree of fatty metamorphosis of the muscular texture, with which may coëxist, as is often seen in old persons, general fat formation, general obesity ; but also the reverse is not unfrequently seen.

The force of the heart being lessened, the blood current becomes tardy, and thrombosis happens, generally speaking, mostly in the most remote sections of the blood current.

(*b.*) *The Thrombosis by Compression.*—To this form belong the cases where a pressure is exerted upon a vessel, as also the occlusion of the vein by ligature, pressure by tumors, dislocation of bones, etc. Also those cases where the pressure acts firstly upon the capillaries, and obstructing, in proportion to the degree of pressure, either the blood current there entirely, producing arterial thrombosis ; or weakening the blood current, and inducing venous thrombosis. To the first category belongs occlusion of the arteries by tubercles ; to the second, venous obstruction in inflammatory conditions. For instance, those of the pulmonary veins in pneumonia, those of the renal veins in parenchymatous nephritis. In all such cases, great anæmia of the parenchyma is generally found, as may be plainly seen in hepatization of the lungs, and the ischæmic tumefaction in Bright's disease. A similar weakening of the current must happen here in different veins, as in marasmus generally, but a small quantity of blood being able to pass through the narrow capillaries, and the blood arriving in the veins with decreased pressure.

(*c.*) *Thrombosis of Dilatation.*—This is like the former a very simple form. To it belong the wall-stationary thrombi of aneurism, as well those of the arteries as those of the heart. Further, the obstructing thrombi of varioces of the lower extremities, labia pudenda, vas deferens, bladder, rectum (hæmorrhoids), lastly the clots of the telangiectases (fung. hæmat.) A varix may contain a certain length of time clots without producing bad results, until a new disturbance supervenes, producing inflammation, with all its consequences.

(*d.*) *Traumatic Thrombosis.* — We come now to that form which has first given rise to the doctrine of phlebitis — appearing, in a certain measure, as the purest kind of suppurative phlebitis. Just here it was thought always that the wall first becomes inflamed, then secreting purulent masses, which furthor cause the secondary general (typhoid) phenomena. It is true, that in some, but exceptional, cases the inflammation forms the essential cause of the thrombosis and its consequences, but as I limit myself in this paper to the subject of thrombosis and embolia exclusively, it is foreign to my subject to go into a description of phlebitis and arteritis, although being intimately connected with our subject.

Limiting myself in the following to the veins, it is proper to distinguish *partial wounding* of the wall from *total division* of the vessel. As a type of the first, I choose the thrombosis after venesection — the so-called venesection phlebitis ; and for the second, thrombosis after operations, especially amputations — the so-called phlebitis after operations.

(1.) *Thrombosis after Venesection.*— The history of this one connects itself with the observation about the healing of the wound of the vein after venesection. The labors of Benjamin Travers, Vatel, Rigot, Trousseau, and especially of Virchow, are conclusive — each of them arriving at the same conclusions. At every venesection some blood runs — partly during the operation, partly after it — into the subcutaneous cellular tissue, and a coagulum is formed in what is called the channel of the wound. These coagula the veterinarians designate by the term thrombus, and Vidal (*Traité de Pathol. extern.*, 1846) uses the same term for the same occurrence in man. This thrombus, particularly the one in the channel of the wound, is of the greatest importance for the healing of the wound in the vein, as taught by Travers, and proven experimentally by Rigot and Trousseau. It (the thrombus) does not only fill the channel of the wound, but it also reaches into the wound itself, and into the volume of the vein. By and by this elongated portion becomes discolored, thickened, smaller ; its surface flattens and becomes smoother, its peripheric parts become embodied with the tunica of the vein, and a lasting closing of the opening of the vein is brought about. Upon a knowledge of these conditions depends all in the so-called phlebitis. Looking at the splendid drawings which Travers and others have given us, it will easily be understood how favorable the conditions are for a further obstruction of the vessel by thrombi in venesection, as the outer thrombus need only grow by precipitation of fibrin to furnish the inner wall-stationary one, and afterwards the obstructing coagulum. In fact, the thrombosis of venesection depends next upon the enlargement of the outer thrombus, and the inner one is far from having any connection with inflammation, being only a continued, elongated thrombus — quite analogous to the one which reaches from small branches beyond their mouth into the volume of the longer veins.

(2.) *Amputation Thrombosis.*—The thrombi after amputation (exarticulation, resection, etc.,) are not generally and essentially connected with phlebitis, but their conditions are, if possible, more manifold than those of the venesection thrombosis, and it would be wrong to ascribe them all to one and the same cause. Speaking of the marantic thrombosis I have mentioned already, how often this one is found after operation, and how this clot formation, remote from the operated surface, may depend either upon general retardation of the blood current, or upon local weakness of the same. We will limit ourselves here to those which begin in the *neighborhood of the operation*; and I must here also make some remarks about the natural healing process. Of the arteries, it is known that they, after being tight by a ligature, become filled with a clot, more or less long, closing their ends, and which, in case it (the clot) does not enter into softening, becomes organized. With a vein it is different, unless a ligature is put around them by the operator.

When the free end of a vein opens in the surface of a wound, the blood next to this place runs out, and the vein collapses. If the vein is provided with strong muscular layers, as is the case with the veins of the skin, particularly of the lower extremities, a real, continued contraction takes place, and the volume is then found greatly diminished — sometimes even disappearing; the inner membrane is laid in longitudinal folds, and the walls thickened. If the vein is connected with the neighboring parts by abnormal adhesions, or fixed by natural connection, like the veins of the bones, the opening does not collapse, but the blood runs out. Only in certain localities (for instance, neck and chest) an aspiration of air may happen. In the usual course, as is especially the case on the extremities, the volume disappears entirely, be it by collapse or contraction. In the favorable course of the healing, an inflammation is gradually formed in the wound, of which the membranes of the veins partake; the inflammatory tumefaction favors the diminution of the volume of the vein more yet; finally granulations form, cicatricious tissue is formed;

this contracts, overgrows the wound in the veins, and closes it. A real thrombus formation is here hardly observable.

But this most simple case does not occur so very often. The venous valves are here of great importance. An emptying of the vessel can only take place in that portion of it lying between the wound and the nearest valve. The blood above this valve, between it and the heart, is retained by the valve, and if, as it happens frequently in amputation of the femur, the valve is situated close above the wound, hardly any blood will flow from the vein. It depends afterwards upon the condition of the collateral vessels. If a vein within the collateral current enters close above the valve, the circulation in a larger vein may be kept up; but if not, or if these branches are too small, the blood above the valve necessarily must become knotted, because the pressure from the heart is wanting, and it stagnates the sooner the nearer it is to the wound, *i. e.*, to the contact with the atmosphere. Looking to the leg, for instance, we find the next longer collateral branch to be the vena profunda femoris, and the great danger is, therefore, that a long thrombus may form, the amputation being performed in the lower third of the femur. It is really found that here the so-called phlebitis is extremely frequent; and that the ill consequences, which are so much feared, do not always appear, is explained by the fact that the thrombus does not enter every time into softening, etc., but that, in a favorable course of the healing, it becomes organized, or, as it is said, an adhesive inflammation is formed.

The thrombosis in amputation does not, therefore, happen through inflammation of the vein, but in consequence of stagnation of the blood, and partly by contact of the air; and it explains the fact that it begins frequently, not immediate to the wound, but somewhat higher up, behind the next valve. Here also we must make a distinction between the formation and the later metamorphosis of the thrombus. The first may be quite a natural and necessary part of the healing process; the other is depending upon many circumstances, and may have, it is true, intimate connection with the peculiar condition of the wound, which, *à priori*, was presupposed in reflecting upon phlebitis.

Much more unfavorable are the conditions in a ligature around a vein, and which for that reason has been more and more abandoned by surgeons in amputations. By the ligature the blood is prevented from running out of the vein, and there is all probability that almost always a thrombus will be formed close to the wound. The nearer the thrombus is situated to this, the more susceptible it is in its later transformation to all the morbid influences which affect the wound. Besides, the ligature around veins falls off very late, and may become thus an obstacle to the healing process.

(*e.*) *Puerperal Thrombosis.*— For the purpose of explaining the formation of the puerperal thrombosis, it will be necessary to take the normal process of the childbed as a starting point, but to separate from it the question of puerperal fever.

Cruveilhier has very correctly remarked that the uterus, immediately after delivery, represents a large wounded surface, and the condition of a parturient woman resembles that of a wounded person, or one operated upon. Usually, together with the amnion, the greater part of the decidua — that is to say, the enlarged and extended superficial layer of the uterine mucous membrane — becomes loosened; and just as well as cases happen in which the entire decidua vera remains in the uterus, other cases, and much more frequent, do also happen, particularly after artificial delivery and after artificial extraction of the placenta, in which not only the superficial, but also the deeper layers of the mucous membrane are torn off, and the muscular layers become exposed. On all these places vessels become torn, being sometimes, if not always, of considerable size. The loosening of the placenta is, therefore, of the greatest importance, which never can be done without considerable division of continuity of the vessels between the chorion and those of the uterus, so that a good many open vessels, principally veins, are left on the placental place. Besides, as is well known, ruptures happen even in normal delivery, but more frequently in artificial ones, in the perineum, vagina, mouth and neck of the uterus. Here we have surely to do with considerable wounds and division of vessels, and the frequent hæmorrhages and bloody secretions show how considerable these lesions are.

In what manner do these wounds of the vessels heal? Finally, as can not be doubted, by healing and cicatrization of the surface of the wound. But this results only slowly, and still the hæmorrhage stops usually earlier. There is the contraction of the uterus, of the greatest importance. The more the uterus contracts, the more the vessels contained in it passively become compressed; the blood is forced out of them, and the muscular texture of the uterus is equally enabled to contract within itself; consequently the conditions for the uterine vessels within its parenchyma are generally more favorable, the stronger the uterine contractions are after birth, and *vice versa* the danger is somewhat greater if the contraction is imperfect. Most observers agree that in uterine phlebitis the uterus remains in an enlarged condition. However, the open vessels do not become closed completely under the most favorable contractile conditions, by the mechanical narrowing and the subsequent contractions only, but a limited thrombosis takes place normally. This is easily explained. The veins are here like after an amputation; the pressure *à tergo* ceases, because their continuity is interrupted. Besides, a complete emptying from blood, as in amputations, is not possible, the blood being replenished in consequence of the want of valves of the sinous veins. If, therefore, the hæmorrhage stops, which happens almost always by the formation of an external thrombus, that is, a blood coagulum in the uterine cavity, which is expelled, at a later period, by after-pain and the lochias, a thrombus forms itself in the ends of the veins up to a collateral branch. This *placental thrombosis has, therefore, to be considered as a physiological process, being necessary for the healing.*

But not always is the placental thrombosis a phenomenon belonging to childbed. In the so-called apoplexies of the placenta, happening particularly after external vulnerations, or concussions during pregnancy, thrombi are frequently formed in the placental sinus, and these may not enter only into the so-called adhesions of the placenta, but also into extended softening. The placental thrombosis, therefore, sometimes dates already from the pregnancy.

Next to the contractions of the uterus, the contraction of the vessels themselves is also of the greatest importance — that is to say, not so much of the intra-uterine ones as those of the neighboring vessels — namely, the uterine, vaginal and pampiniform plexus, and the branches connected therewith, namely, the hypogastrics and the internal spermatic veins. The uterus may contract completely, the healing process in it may proceed quite regularly, and still these may remain (after birth) in their abnormal state of dilatation, as frequently has been seen in autopsies. For the regular involution of the whole generative apparatus, it is absolutely necessary that an *active contraction in the vessels* takes place. To this, in all probability, a peculiar nervous influence is necessary, and the occurrence of a timely lactation, particularly milk fever, may have a great influence in this respect; whilst all debilitating and paralyzing influences, acting already badly upon the uterine contractions, disturb the reduction of the volume of the vessels.

The pathological thrombosis happens, therefore, principally at two entire different places, and by quite different causes. The placental form represents but an unusual continuation and extension of the physiological one — new masses of coagulum attaching themselves to the obstructing clot in the ends, following in their direction the sides of the uterus. This form has, therefore, great similarity in its development with the thrombosis of venesection. The other, as well the intra- as extra-uterine forms, found in the neighborhood of the uterus, in the broad ligaments, in the vagina, in the circumference of the tubes and ovaries, belong to the thrombosis of dilatation, although marantic and inflammatory conditions may favor much their production, and which may step so much into the foreground as to appear the true causation. Principally have here to be mentioned the erysipelatous and diphtheric inflammations of the puerperal fever, whose paralyzing influence upon the muscular texture of the vessels is very easily comprehended.

But with this the question of the puerperal thrombosis is not exhausted. Already, since David Davis (*Med. Chir. Transact.*, v. xii.) and Velpeau (*Arch. Génér.*, 1824, t. vi.), the importance of venous obstruction for the occurrence of the phlegmasia alba dolens puerpuralis is known. This is usually found, as is well known, in one or the other lower extremity — however, it may also happen in the same manner in the external genitals, and at even more distant places ; for instance, in the upper extremity, in the eye, etc. We cannot enter here into the question if the production of phlegmasia has to be ascribed every time to an obliteration of the veins or not ; but the question is, how, in case of a real thrombosis, it has to be explained. The answer is, that in many cases, particularly where distant veins are obstructed, marantic thrombi exist, just as they explain the one-sided painful œdema in phlegmasia alba dolens non puerpuralis. In the puerpural form, as it shows itself in the lower extremity, and the external genitals, the explanation given by R. Lee is admissable; namely, that the disease is continued from the uterine branches of the hypogastric vein to the iliac and femoral vein of the afflicted side. Only we must not attribute the continuation to a wandering inflammation, but to a gradual growth of the thrombi. But this explanation is neither admissable in all cases, as not always a prolonged clot formation exists, but the clots begin to form themselves in the femoral vein itself. Already Velpeau observed that the pressure of the child's head upon the iliac vessels gives an important point of explanation ; and it is certain that, if not always present, dilatation thrombosis may form itself easily, particularly if another cause becomes added (long rest, local inflammation, marasmus). Such thrombi may certainly commence already during pregnancy, so that a further growth, in a longer or shorter time after delivery, causes the complete obstruction of the vessel, producing the painful tumefaction.

(*f.*) *Secondary Thrombosis after Inflammation of the Wall of the Vessel.*— Although it is not my intention, as said in the beginning of this paper, to enter into the question of phlebitis arteritis, neither into that of pyemia and metastasis, I consider it still necessary, for the purpose of giving you the different forms of thrombosis, to speak about the formation of secondary thrombosis, corresponding to the doctrinal idea of phlebitis, and which has been studied, in most investigations, without being able to find a satisfactory solution. Here the question arises, how does the inflammation of the wall of the vessel produce a coagulation of the blood? for the opinion that the mass which fills the volume of the vessel consists in an exudation from its wall, is positively denied by Virchow. He does equally contradict Cruveilhier in his opinion, according to which the coagulation of the blood is the first effect of the inflammation; as also the proposition of *Rokitansky*, that the exudation furnished by the wall of the vessel induces the fibrin to coagulate. Nobody has seen such an exudation, and that the inflammation does not produce its first action in the coagulation of the blood, but contrary, in an alteration of the walls of the vessel, can positively be proven.

Most generally those inflammations, entering into suppuration, give rise to thrombosis; and just this circumstance has misled observers. After Ribes had directed his investigations to this point, and shown the frequency of phlebitis, in the various suppurations, it was reasonable to conclude, with him, that an absorption of pus really is taking place. Even the microscopic examinations could strengthen this conclusion; for just in these cases we find, occasionally, instead of the simple regressive detritus masses of the usual puriform softening, real pus — that is, a liquid consisting of almost entirely nucleated cellular elements. It is hardly possible that this liquid is produced by a metamorphosis of the thrombi; but, on the contrary, it must be admitted that a *real entrance of pus into the volume of the vessel* takes place, as shown in some cases, with great certainty, although not in all cases belonging to this class.

How does this pus enter into the vessel? Certainly not by resorption or absorption, as was concluded. As long as the wall is uninjured, this only can happen with fluids; and we can not refer to the resorption of chyle to this, in many respects, so peculiar process, nor to the penetration of rougher bodies into vessels. Virchow attributes the latter, not to resorption, but to perforation. The venous resorption or absorption can only extend itself to fluids, or rather to what is dissolved. Where pus seems to be absorbed, the admission never happens in substance, believed so, as long as pus was looked upon as a simple fluid; but since it is known that this consists essentially of formed constituents, its intravasation can only happen in the same manner as the extravasation of blood — that is to say, of the blood corpuscles, namely, through the wall of the vessel wounded and interrupted in its continuity. Where this does not exist, no admission of pus in substance does happen; on the contrary, the pus serum is only resorbed, whilst the pus corpuscles, dry, remain stationary, or they liquify by fatty metamorphosis or simple softening, and the product of their disintegration is subject to resorption. Nowhere has such a great certainty by microscopic experience been gained as in this question, since the continuity of the vessels, the bodily nature of the pus cells, and, finally, the possible alteration of them, has become truly known. If we consequently have to consider an opening in the wall of the vessel as a first condition for the intravasation of pus corpuscles, of the pus in substance, two cases are only possible. The matter has to enter through preëxisting openings, or it has to work itself a way into the vessel. The first may happen in wounds, operations, and other traumatic lesions, where veins with free openings are exposed in suppurating surfaces; the second may happen in primary inflammations, with suppuration, in abscesses, in diffused phlegmasias.

An aspiration of pus into the open veins does not take place easily, and is, therefore, very rare; for it could only be possible immediately after the vulneration, as the veins become closed soon after by a physiological thrombus. Besides, it is only possible when air is admitted at the same time, and these are very exceptional cases; and what has been looked upon in phlebitis as pus, belongs, undoubtedly, to the softened mass of the thrombi.

But different it is with the *perforation* of the wall of the veins by suppuration. This is nowise as seldom as was believed. Quite a number of cases have been reported by Travers, Barnet (*Lancet*, 1847, March), Adams (*Edinburgh Monthly Journal*, 1845); and Tudichun has quite lately reported several cases (*British Med. Journal*, May, 1860).

How does the secondary thrombosis now happen? On the altered places of the wall of the heart, or vessels, flat deposition takes place, usually of a pale, pale-red, gray-white, or yellow-white coagulum, which adheres at first quite loose, and is easily stripped off. These *wall-stationary* thrombi consist, already in the beginning, of relatively firm, fibrillated fibrin, and numerous interspersed, colorless corpuscles; they show, consequently, a composition like the one described before. Gradually they enlarge, by lamellated addition of fresh layer of coagula; they become more firm, and extend on the surface and towards the blood current, as also in thickness. They have, then, the greatest similarity with croupous membranes. Their adherance increases, also, in proportion as they grow, and whilst the blood passes by them in the beginning, they form, gradually, a greater narrowness, and finally complete occlusion of the vessel. The thrombus formation proceeds also backward to the next collateral, and reaches an extent which causes the starting point to be entirely overlooked.

The effect of these secondary thrombi is, therefore, at first not quite an unfavorable one, as the purulent matter, breaking ultimately through the wall, becomes by them sequestrated. It even happens, sometimes, that this result is a lasting one — an adhesive organization forming itself before and behind the primary affected point, resisting the further action of the purulent matter. However, this sequestration is very uncertain, particularly in ischorous suppuration. Gradually the thrombus may soften, assume also an ischorous, putrid condition, and serves then as a convenient guide for the destruction into parts which, up to that period, have remained free, and finally arrives in the neighborhood of the blood current still circulating. This is easily recognized by the miscolored, dirty greenish or yellow-gray appearance of the coagulum, and by the thin, stinking and grayish appearance of the softened contents, with which later may be mixed some intravasated, purulent and ischorous masses. This secondary thrombosis is probably more frequent in small veins, particularly the veins of the bones, the veins of the diploe, in wounds of the head, but where also primary thrombus may occur, in consequence of the contact of the open vessels with the air.

Very plainly and frequently does this kind of thrombosis happen in the larger and middle cutaneous veins of the face and extremities, but principally in the sinuses of the dura mater and veins of the liver. Just in the liver, next to the cerebral sinus, it is the plainest seen, that usually the formation of an abscess takes place, and only by and by the phlebitis supervenes — not an inflammation of the portal, but that of the hepatic veins. (Budd, *Diseases of the Liver.*)

ART. II.

Oinomania.

BY GEORGE CORNELL, M.D., MILAN, OHIO,
Assistant-Surgeon One Hundred and Twenty-Fourth Regiment, O.V.I.

The subject of Moral Insanity must ever be a perplexing one. To what extent the plea of insane impulse, ungovernable emotion or passion can safely be admitted in defense of actions which would else be guilty or criminal, neither precedent nor judgment can always determine. Not to neglect the claims of personal responsibility and public justice on the one hand, and on the other to avoid the distressing alternative of treating a sick man with reproach or punishment, may often be too much for human wisdom.

Oinomania is defined by Dr. Carpenter to be "an inordinate, uncontrollable thirst for excessive quantities of intoxicating drinks." Dr. Wood, under the head of "Moral Insanity," speaks of "an irresistible propensity to the abuse of alcoholic drinks, which is now and then met with in individuals paroxysmally, and quite independent of the mere habit of drinking." And, again, speaking of the causes of insanity, "There is a morbid state of mind connected with the use of alcohol, not the result of the stimulant, but antecedent to its use on any particular occasion, and consists in a morbid and irresistible craving for it, coming on at times, and constituting a sort of monomania." Dr. Rush, in his "Diseases of the Mind," says: "The use of strong drink is at first the effect of free agency. From habit, it takes place from necessity. That this is the case I infer from persons who are inordinately devoted to the use of ardent spirits, being irreclaimable by all the considerations which domestic obligations, friendships, reputation, property, and sometimes even by those which religion and the love of life can suggest to them." But the most complete description of the malady which I have seen may be found in Dr. Carpenter's "Use and Abuse of Alcoholic Liquors." I will give a very condensed statement. Oinomania is of three forms: acute, paroxysmal and chronic. The acute is the rarest of the three, sometimes accompanying puerperal hæmorrhage, convalescence from fevers, excessive venereal indulgence, and dyspepsia. The paroxysmal form is much more frequent; is seen in connection with injuries of the head, the pregnant, catamenial and critical periods in females, and in men whose brains are overworked. It also frequently occurs by hereditary influence in children of insane or intemperate parentage.

The most common and most incurable form of oinomania is the chronic. The causes are, injuries of the head, heart-disease, hereditary predisposition and intemperance. Here the overwhelming desire for stimulants is incessant. So much for the description.

We are all of us too familiar with the phenomena of the paroxysmal form of oinomania; the deep debauch, the subsequent apathy and depression, remorse and loathing of stimulus; the renewed application to business, with resolutions never to yield again to temptation; the ensuing days, or weeks, or months of sobriety; and then the restlessness and depression which betoken the approach of another exacerbation of the malady, and complete the cycle of disease. These are the phenomena of disease, rather than of the *voluntary* indulgence of appetite. For were there only a moral obliquity, and not a physical disability in the case, why should not the resolutions of better behavior which follow each debauch be strengthened, and the habits of inebriety broken up by the weeks or months of sober experience which intervene? But not so, as in other forms of paroxysmal disease; the lapse of time serves only to develop again and again the phenomena of the malady.

The chronic form of oinomania, too, needs no description. We all know the habitual drunkard; the morning moroseness and irritability, the tremor of the limbs, the prostration of bodily and mental power, the craving for stimulus that knows no denial, the few hours of comparative bodily comfort and mental power that follow the indulgence, and the sleep of beastly intoxication that finishes the day. From such depths of wretchedness, touching appeals, like voices from the dead, have come. We quote from the essay of Charles Lamb: "Oh, pause, thou sturdy moralist, thou person of stout nerves and a strong head, and first learn how much of compassion thou may'st virtually mingle with thy disapprobation. Trample not on the ruins of a man. Exact not, under so terrible a penalty as infamy, a resuscitation from a state of death almost as real as that from which Lazarus rose not but by a miracle. Begin a reformation, and custom will make it easy? But what if the first steps be like going through fire? What if the whole system must undergo a change as violent as that which we conceive of the mutation of form in some insects? Is the weakness which sinks under such struggles to be confounded with the pertinacity which clings to other vices which have induced no constitutional necessity? I have known one in that state when he has tried to abstain but for one evening, in the violence of the struggle and the necessity he has felt of getting rid of the present sensation at any rate, I have known him to scream out, to cry aloud, for the anguish and pain of the strife within him. *The man of whom I speak is myself.*"

We wish to present some conclusions which we deem important.

1st. That this disease, oinomania, exists with a frequency which demands more attention and better treatment than it has hitherto received. However indefinite the line which bounds it, though it may be impossible to tell exactly where the cravings of appetite become irresistible, still there is a point in the history of many inebriates where voluntary action ends and necessitated action begins. This we see, from the abundant citation of our best authorities which we have made, from the phenomena of the disease itself, and lastly from the testimony of its victims, who, as in the above quotation, protest against placing their habit on a level with other vices which involve no systemic changes, and who compare their trials at reformation to ordeals of fire and knife. Charles Lamb may well be allowed to speak in this behalf. He who had the heroism and powers of self-sacrifice to devote his life to the care of an insane sister, would surely have been able to break the bonds of any merely vicious indulgence. We are all of us familiar with cases where the victims of this diseased propensity have testified to its uncontrollable nature by asking admission to Lunatic Asylums and other places where that restraint might be exercised over them by others, which they could not command in their own behalf.

2d. Although in many cases oinomania is the result of tippling habits voluntarily and guiltily indulged by the individual sufferer, yet this is by no means necessary. As stated above, the depraved propensity may be derived by hereditary transmission from an insane or intemperate parentage, or may arise in connection with other diseases when "neither the man has sinned nor his parents." In the case of the gifted essayist above quoted, it is quite probable that this appetite for strong drink was partly the manifestation of hereditary insanity, for he was himself an inmate of a Lunatic Asylum for a few weeks, and his sister was a sufferer from the same terrible malady through her whole life.

3d. These facts have an important bearing on individual, social and legislative action. In the light of them we can see a large amount of misplaced scorn, reproach and punishment. We can see that charity demands more sympathy with inebriates, and justice more adequate provision for their protection. For, so far from truth is the popular notion that drunkenness is always and merely a vice, many persons, as we have seen, have within them those diseased systemic tendencies, which, apart from any wrong doing of their own, go far to produce or may even compel habits of inebriety. Or, if such habits have been acquired by the purely voluntary action of the individual, if the condition of the physical system is so entirely changed that oinomania is established, we have then only a sick man to deal with, and his guilt or innocence becomes a question of the past. It is true that we may extend our charities too far; and anything which tends to undermine a sense of personal responsibility for voluntary actions, should be sedulously avoided. We have to keep as near as possible to an indeterminate line.

The plan of hospitals for drunkards, though but recently acted upon, is not a new one, but was strongly advocated by Dr. Rush in his work from which we have quoted. "Hard drinkers," says he, "are as much objects of public humanity and charity as mad people." Here, if any where, is to be found an unanswerable argument for efficient legislative interference in behalf of the drunkard. Society, surely, has the right to protect its incompetent and suffering members from imposition and cruelty. And laws might be enacted which would render hospitals for drunkards unnecessary, by making the whole country such a hospital, declaring the *drink* contraband instead of the *drinker*, if the people were put in possession of the facts in the case. Dr. Hutcheson, in the report of the Glasgow Lunatic Asylum for 1842, says that chronic oinomania is generally incurable, as also the hereditary variety of the paroxysmal form. So that either the drink or the drinker must be kept under perpetual surveillance. Let it be the former. And let physicians, as conservators of a most important branch of the public welfare, endeavor so to enlighten public opinion as to realize this result.

ARTICLE III.

Case of Intestinal and Mesenteric Disease, with Morbid Complications.

BY J. BOWMAN, M.D., SISTERSVILLE, WESTERN VIRGINIA.

Was called to see Mr. Charles B., aged forty-six years, on the 7th October, 1862. He had been complaining for several years, but more particularly during the last eight months, of pain and tenderness of the bowels, accompanied with spasms of the same. From the effects produced by these it was impossible for him to ride, or do other work that necessarily required much exertion. Until I was called to him, he had never in his life taken any medicine, other than at different periods some of "Wright's Indian Vegetable Pills." Had often been compelled to rise during the night, and rub his abdomen with liniments, heat himself by the fire for hours, and manifold other things, with which to ease himself of the pain. At the time I saw him, his tongue was coated; complained of pain in the stomach and bowels, attended with indigestion and costiveness; stools dry and hard, with apparently very light discharge of bile.

I gave an emetic of tartarized antimony and ipecac, followed in four hours with rhei, and hydrarg. chlor. mitis, āā grs. x.

These remedies produced free evacuations, with some relief of the stomach and bowels. But on the 15th he complained of severe pains, and suffering in the testes and spermatic cords, attended with difficulty in urinating; of this, however, he had complained for many months, but it now seemed more acute than formerly. I gave a preparation of buchu, uva ursi, and juniper, alternating with sixteen drops of tinct. ferri chlor., in two ounces dandelion root tea, each three times per day. This gave some relief, and on the 20th, I gave a tonic of tincts. of colombo, gentian, and quassia. This treatment was continued until November 5th, when all of the former symptoms began to return once more. Various antispasmodics, anodynes, and laxatives were administered, and a suspensory bandage and sack to support the testes was advised, which, in a few weeks, afforded much relief.

During all of this time, a strict diet had been enjoined; but having, unfortunately, partaken freely of beefs' liver, he became much worse, and I was called in haste. Having evacuated the stomach, and continued former treatment, he became relieved of the sufferings in the testes, but was continually annoyed with the pains and spasmodic contractions in the bowels; the bowels actually forming into hard knots.

November 27th—I advised use of syringe, with mild laxatives of rhubarb and magnesia. His tongue had been entirely free from coating after the first treatment, but now a thick coat formed upon it; to remove this, I gave three grains of blue pill for four days, followed with oil and turpentine. This gave some relief, and was followed with

℞ Extract taraxacum, ℥ ss.
Sulph. quiniæ, . Citras ferri, aa ℈ ij.
M. Ft. in pillulæ xlij. S. Give one thrice daily.

In conjunction with this, the antispasmodics were used. During this time I was obliged to cup and blister freely over the bowels, and to administer opium in various forms two or three times per day—without which it almost seemed that his suffering was so great that he could not live.

From this time to Dec. 24th I was obliged to cup several times, followed with blisters, fomentations of hops with hot vinegar, and mush and mustard poultices. Also gave

℞ Rhei pulv., . Soda sup. carb.,
Carbo ligni pulv., . Colombo pulv., aa grs. xij.
M. Ft. chart. iij. S. one thrice daily.

These, in connection with a tonic of ferri et quinia cit., gave much relief.

But the violent contractions of the bowels, attended with very severe pains and a deep seated soreness, were all so discouraging that I advised a consultation. On the 27th Dec., an eminent physician—Dr. R. H. Cummins, of Wheeling—was called to see him. This gentleman advised but little change in the treatment: a drop of creosote in syrup simp. three times per day, together with

℞ Pulv. rhei, grs. ix.
Carb. magnesia, . Pulv. colombo, aa grs. xij.
Oleum menth. pip., gtt. iij.
M. Ft. in pulv. iij. S. one three times per day.

Strict regimen was also recommended.

But he continually grew worse. The swelling in the abdomen soon began to increase. Cupping and blistering no longer gave the accustomed relief; all which he obtained was whilst under the influence of morphia. In about five days he had a spasmodic stricture in the bowels, apparently about the pyloric orifice of the stomach. Afterwards, when this yielded at the cæcum, he was attacked with vomiting, which continued for five days, but with no evacuation of the bowels. The abdomen was swelled tremendously. A few cups, followed by a large blister, finally, with the aid of sulph. morphia, checked the vomiting. The peritonitis seemed to yield under a fourth of a grain of morphia with a grain of opium, and free evacuation of the bowels followed.

At this time the relief was so decided that his friends built many hopes that he had passed the critical period, and would yet recover; still I could see no such flattering grounds for encouragement. Some three days after the swelling had abated, I called to see him. He was quite easy, but had a cough, which was altogether a new feature. I again warned the friends that to build hopes on his ultimate recovery was useless, as he could probably survive but a few days.

On the 11th January I found him failing very fast, and on the 14th he died.

Post-mortem, ten hours after death, revealed the most extensive disease that I have ever witnessed, and I have examined several bodies, both in New England and in this country. The jejunum and ileum were diseased throughout; also the glands connected with them, especially Peyer's. The mesentery and mesenteric glands appeared, likewise, much diseased. These were all of a dark-purple color, more easily torn than cut, and five to six times their natural size, with the mucous lining in a state of ulceration. The colon was apparently healthy, except at the opening of the ileum into it. The cœcum and appendicula vermiformis were also diseased.

At the sigmoid flexure the dark-purple, echymosed condition began again, and continued throughout the rectum. The mucous folds were much like a piece of beef which had been exposed to the weather for a length of time — ready to be scraped off at the slightest touch. I should have stated that about one-third of the stomach, connected with the pyloric orifice, was in a state of ulceration, presenting the same color as above described — containing much melanotic fluid, with occasional pus-like patches and discharges.

The left kidney was much diseased, and the liver had several yellow tubercles distributed throughout it. The gall bladder was twice the size of a large beef's gall; its ducts were almost impervious. The omentum and peritoneum were, likewise, in a state of gangrene.

I might say much more, but I have tried to be as brief as possible, fearing that my readers might become tired. But I wish to propound one question, and I trust that some of the contributors to your valuable journal will answer it: Could this man have been cured, taking his case at the time I did — three months previous to his death? If so, what different treatment should have been adopted, having the advantage of the post-mortem examination?

I should have stated in connection with the description of his case, that this man's father, brother and daughter died with disease of the bowels. Also that his pulse remained regular, and with no fever until about the last week of his life.

◆

The Dangers of Home Doctoring.—A surgeon of Birmingham recently prescribed, for a woman of that place, a medicine containing morphia, for the cure of a cough, which had the desired effect. Shortly afterwards, on her infant suffering likewise from cough, the woman administered to it "some" of the medicine, which was attended with a fatal result. The coroner's jury which was summoned on the occasion, apparently wishing to avoid casting censure either on the surgeon or the mother, returned the singular verdict, "Died by the visitation of God."—*London Lancet.*

Proceedings of Societies.

Proceedings of the Cincinnati Academy of Medicine.

Reported by W. T. Brown, M.D., Secretary.

At various sessions of the Academy during January and February the following reports of cases were made :

Dr. Murphy — Said, last Wednesday evening, at 6 o'clock, he was called to see a bright, intelligent boy, 13 years of age, of nervous temperament. He had been at College Hill attending school for several months ; he came home sick ; his expression was singular ; his lower lip was bleeding, and he was biting it. He was feverish, pulse 130 ; said his left hip pained him. There was tenderness along the thigh and around the knee ; and to pressure along the middle third of the thigh, and over the sciatic nerve, he was excessively sensitive. The Doctor made a prescription of spirits mindereri and antimony, first giving a purgative of jalap. The following morning (Thursday) he was better, but had talked through the night and was restless. His lip was swollen, and he was biting it. Dr. M. was perplexed with the case ; gave him nitrate of potash, spirits mindereri and antimony, and directed the concentrated tincture of radix aconite to be applied over his hip. He conversed rationally at 6 P. M. Friday he passed another restless night. He saw him three times during the day. In the morning he was entirely rational, pupils natural. He was still tender to pressure over the sciatic nerve ; pulse from 125 to 130 ; continued the treatment, and gave beef essence. In the evening, symptoms of brain trouble were manifested ; pupils dilated. He was talking deliriously ; pulse 140 ; respirations 62 per minute. He had given some wine of colchicum, with nitrate of potash. He asked for counsel. Dr. Avery was called, who said the case to him looked like one of poisoning from stramonium ; there were none of the symptoms of poisoning from colchicum, and to be more certain of the prescription being put up as ordered, he went to the druggist, who told him he was sure he put up colchicum. They applied mustard drafts, and waited two hours, when his respirations were 64 per minute. He was pitching about, screaming, driving horses, etc. ; pupils at quarter past nine contracting and dilating. They gave him carbonate of ammonia, applied a blister to the back of his neck, and gave him beef essence. He tossed about and talked most all night. At 4 A. M., he got over on his face, and died in that position.

The Doctor asked, was this a case of inflammation of the brain from the first, or a case of metastasis?

Dr. Avery thought he must have had a convulsion, in which he bit his lip.

Dr. Murphy said, in reflecting over this case, the question came up, if he had bled him would it have done him any good? At quarter to 5 o'clock, when probably effusion commenced at the base of the brain, leeching would have killed him.

Dr. Fries — Said he was called to see a young man in the country, suffering from what he supposed to be at that time a cancerous excrescence, occupying the entire lower part of his abdomen, involving the penis and scrotum, and extending down the thighs. There were several large excrescences over the lower part of the abdomen, one as large as his fist. The odor arising from them was like that from fungus hæmatodes. There were also several sinuses extending in different directions from the excrescence. He had fever and diarrhœa. At the request of his friends, he consented to operate, and removed the fungus mass; laid open the sinuses, through some of which he could pass his finger into the abdomen.

He had him put on a good nourishing diet, and gave him Fowler's solution, and muriate tincture of iron alternately. He expected an unfavorable termination of the case, but heard nothing from him for four weeks, when, very much to his surprise, the young gentleman walked into his office, very much improved in his general health. His scrotum was one-half less, and many of the sinuses were closed up. He opened some new sinuses, which were not disposed to heal. The young man is now in good health, and for the last ninety days has performed all the ordinary labor of a farmer. Last week he brought to his office three grape seeds, which passed through the sinuses communicating with the abdominal cavity.

The Doctor remarked that the whole disease, previously supposed to be of a fungus nature, he believed was caused by the presence of these seeds, which had probably become entangled in some of the folds of the intestines, and ulcerated through.

Dr. Gans — Said he had under his observation, rather than treatment, two young ladies, sisters, suffering from a peculiar nervous affection. Both look healthy; they sleep well, have good appetite, take exercise, etc. Their minds are not injured by novel-reading, nor are they under any religious excitement. About fifteen minutes before the attack comes on, they feel an unusual weakness ; they are seized with a disposition to move up and down, the entire body being put in active motion. The paroxysms continue from fifteen minutes to two hours. They will talk, and even laugh during the paroxysms. At last, they give a couple of more violent jerks, and it is all over. They came lately from Europe, where they have been attended by the most eminent physicians without relief. They never have the paroxysms away from home. The physicians in Europe could not make out what the disease was.

The Doctor asked the members whether they had ever seen anything similar.

Dr. Carroll — Inclined to the opinion that they were hysterical. When he was physician to the Orphan Asylum, one of the children, 13 years of age, took convulsive action. Two sisters became similarly affected, and then a number of others. He could do nothing with them until he separated them, and then they got well.

Boerhave, or Van Swieten, once, in a similar case, ordered a fire to be kept up constantly in the room, and an iron to be kept red hot, and threatened to burn the patient on the inside of the arm, if she had another paroxysm. It cured it at once.

He also reported a case of chorea, treated in the Commercial Hospital. She was brought there last June, from the Orphan Asylum, laboring under this disease, which had continued for three years. She ate freely, was of gross habit ; had headache constantly, costive all the while. He purged her first, then prescribed iron ; afterwards gave fifteen drops of Fowler's solution during the day. When he left the hospital, he directed the house physician to give her a mercurial occasionally, to keep her bowels open. She is now really convalescent.

Dr. Richardson—Said he wished to call attention to one point of the report of Dr. Tate recently read to this Academy, and that was *cephalic version.* He understood the author of the report to recommend cephalic in preference to pedalic version, even if the liquor amnii has been evacuated for some considerable time. If wrong in his recollection, the report itself would set him right.

From the time of Hypocrates, it was the custom to attempt cephalic version in all preternatural cases, all being considered as such when the head did not present. But Franc and Paré, some three hundred years ago, arrested this practice, and for a long time the other extreme prevailed. For some seventy years past, however, cephalic version has had many warm advocates, some of whom have been men of no mean position in the profession. Only a few years ago an essay was read before our State Medical Society on the subject of "Difficult Labors," cephalic version being the principal matter treated of. The Society awarded the essayist a prize. According to his recollection, the essayist claimed, at least by implication, originality in two particulars; first, its performance under prolapsion of the arm, and second, his mode of manipulation. In regard to the first, Merriman reported a similar case before the essayist was born, and Spence one not long afterwards. In regard to the second, Flamant, nearly seventy years ago, publicly taught a similar mode of manipulation, adapted to the four positions of the shoulders.

Dr. Wm. B. Davis — Reported several cases of typhoid fever, and made some remarks in regard to the contagiousness of the disease. It first occurred in his practice in December. In one family, the first to have the disease, was a little girl. She was taken care of by her mother exclusively. As she convalesced, a second daughter was taken ill with the same disease. Her mother also nursed her, notwithstanding the doctor's remonstrances about her remaining in the room all the while. This patient, after three weeks, commenced to convalesce, when the mother was taken sick. She was seized with a chill; but from the fact of her having formerly lived in Illinois, where she was subjected to a malarious atmosphere, and frequently had chills, she thought it was only the old disease returning. Under these circumstances, he was called to see her. Her extremities were cold, her face resembling the countenance of one in the collapse stage of cholera; pulse fine and thready — at times absent. He immediately prescribed stimulants, one grain of piperine every four hours, and ordered wine, ale, citrate of iron and beef essence. The next day there was no improvement; reaction had not come on. He continued the treatment, increasing the piperine to one grain and a half. The third day there was no improvement; treatment continued. The fourth day reaction came on. As soon as he entered the room, he noticed the change; and the first question she asked him was, "Doctor, did you ever take piperine?" From that time she improved, and now, although it is only the tenth day, she is nearly well.

In another family, the husband first had the disease; was nursed by his wife almost exclusively, when she was taken with the same disease. Afterwards the husband's brother, who had frequently been with him, was also taken sick with typhoid fever.

In another family, a young lad had the disease, and was watched by his mother. As he convalesced, she was taken sick with typhoid, though she was over fifty years of age. Authors say few persons over that age are liable to it. In all of his cases, he found it necessary to resort to stimulants from the first.

Dr. Graham — Said he was called in consultation, day before yesterday, to see a young man 21 years of age, of a hæmorrhagic diathesis. For years he had been subject to a bleeding from the nose. He was perfectly anæmic. Dr. Lawson was the attending physician. He had carefully examined him, to ascertain whether the bellows murmur was due to organic difficulty in the heart, or simply to the anæmia. Forty-eight hours after, a friction sound was heard, indicating pericardial inflammation. Under these circumstances he was called in. He found it rather embarrassing to know what remedies to suggest, but concluded it would be well to trust to powerful counter-irritation, and give some anodyne internally. Two days after, he had improved; friction sound had disappeared. He considered there was no effusion, because there was no increased dullness. Blistering, the Doctor remarked, as the patient had been bleeding quite recently, would relieve the hæmorrhagic difficulty, as it would increase the fibrin in quality. Long ago he had made use of blistering to increase the fibrin of the blood in hæmorrhagic difficulties. The power of the inflammation on the surface increases the amount of fibrin, and also its coagulability.

Dr. Wm. B. Davis — Further remarked, in regard to piperine, that he had used it a great deal, and had found no medicine have a better effect for what he desired. During the years of 1854 and '55, he had a number of cases of cholera, and he usually prescribed, in the collapse stage, one grain of piperine every hour. And in regard to typhoid fever, he had had more of it in his practice in the last two months, than for eight or nine years previous. He always gave tonics — ale, wine, beef essence, citrate of iron, etc. He had not lost a case; he had no delirium. Some of the cases presented the dry tongue, but this he attributed to the late period at which he was called in, and the patient having taken repeated purgations.

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THE anniversary meeting of the Woman's Hospital Association was held in New York on January 31st. Over 1400 out-door patients received medical and surgical aid during the last year, gratuitously, besides the free list in the hospital. Dr. J. Marion Sims was the founder of this institution; and he and Dr. Thomas Addis Emmet are now its surgeons, the latter having charge of it.

Reviews and Notices.

The Principles and Practice of Obstetrics: by GUNNING S. BEDFORD, A.M., M.D., Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York; author of "Clinical Lectures on the Diseases of Women and Children." Illustrated by four colored lithographic plates, and ninety-nine wood engravings. Third edition, carefully revised and enlarged. New York: Wm. Wood & Co., 61 Walker Street. 1863. Pp. 770.

We have received, through the publishers, a copy of the third edition of Dr. Bedford's *Obstetrics*, and judging from the rapid exhaustion of the two former editions, the work is destined to have a greater sale and a more extended popularity than his book on the *Diseases of Women and Children*. Although the work has been but thirteen months before the public, a third edition has been called for by the publishers and the profession.

As we gave in a former number of the *Lancet and Observer* an outline of the general plan of the work, we shall at the present time confine ourselves to a few selections, more for the purpose of showing the progress being made in this department of science, as ennunciated by the judicious and able author, than with a view to a critical analysis.

At page 217, in speaking of pregnancy, he says:

"The old school men taught that pregnancy is a peculiar state calling for periodical medication, and that the only security for a safe and healthy gestation was the strict observance on the part of the practitioner of certain prescribed rules of treatment. For example, the doctrine very generally obtained, that one of the universal characteristics of gestation is plethora; and hence the maxim that blood should be abstracted from the arm of the pregnant woman in the fourth, seventh and end of the ninth month. You have seen that plethora is not necessarily an accompaniment of pregnancy, and, therefore, any rules of treatment founded upon such an assumption, can not be sustained according to the laws of rigid analysis; and, moreover, if you were to act in blind obedience to this precept, you could not fail to do a vast amount of harm."

At page 218, in speaking of the prejudice against the use of emetics in pregnancy, he remarks that he has paid some attention to this subject, and he is clearly of the opinion that the prejudice is unfounded, and calculated to do harm, by causing the practitioner to withhold them when really indicated. In corroboration of this opinion he gives the following case:

"A married lady, aged 27 years, one year married, was in her seventh month of gestation. Her health had always been good, and particularly so since her marriage. Nothing of any importance occurred during her pregnancy, with the exception of the ordinary phenomena incident to this condition, until the night of December 23d, when, being in her seventh month, she was suddenly attacked, while in bed, with vertigo, followed by loss of consciousness, and stertorous breathing. But a few minutes elapsed before I was at her side. Here, evidently, was a case of apoplexy. What was to be done?' In the hurry of the moment, and his mind fixed upon the two prominent symptoms—the loss of consciousness and stertor—the physician would most likely plunge his lancet into the arm for the purpose of relieving the brain of its pressure. He has read in the books, and heard *ex cathedra*, that in apoplexy blood-letting is the heroic remedy. This is a case of apoplexy, and therefore he bleeds. Now, gentlemen, this may be a syllogistic argument, and so far as the logic of the schools is concerned, it may have impressed upon it the seal of approbation. But the question is too naked, it is too abstract. In one word, it lacks the necessary collaterals for the medical man in the sick-room; and it is precisely this want of completeness which oftentimes paralyzes science in its practical ministrations, and exposes both practitioner and patient to the broadest empiricism. It is very true that, in many instances, prompt and full bleeding is the remedy for apoplexy, but not always. We have, for example, apoplexy from gastric repletion—the stomach is filled with indigestible food, thus causing mechanical obstruction to the circulation. In this case, bleeding would be so much time lost, and the last spark of life might become extinct during its performance.

" As soon as I approached the bed of my patient, I observed on a chair a basin, in which I was informed she had several times attempted to vomit. I noticed in the basin some small pieces of salad, which had evidently been ejected from the stomach. On inquiry, I learned that she had spent the evening at a friend's house, and had partaken very freely of lobster salad and ice cream. Without delay, I mixed twenty grains of ipecac in half a tumbler of warm water, and with some little difficulty caused her to swallow it. In a few moments it took effect, and you would have been amazed to see the quantity of undigested food thrown from the stomach. As soon as this offensive material was ejected, the patient evinced marked and gratifying evidences of returning reason—the stertor ceased and her consciousness was shortly in full play. She went on to her full term; and I had the pleasure, in two months from that time, of presenting her with a fine little boy, alive and in good health. One moment's hesitation on my part, or the too ready adoption of the routine practice of bleeding, would have sacrificed two lives, and thrown into the deepest grief a devoted husband, whose anxiety on the occasion bordered almost on bewilderment."

At page 495, in speaking of the treatment of convulsions, our author shows his good sense and sound judgment as a physician. He remarks:

"In the treatment of convulsions during pregnancy or labor, you are to look beyond the mere paroxysm; you should, so far as may be, endeavor to ascertain the cause of the nervous disturbance, and not blindly have recourse to remedies which too often have nothing to recommend them in given cases but mere custom. Just discrimination is a very necessary and essential element in the character of a medical practitioner; he should school himself to close observation, so that, through rigid analysis, he may be enabled to deduce truthful conclusions. Therefore, instead of having your minds fettered by preconceived opinion in regard to any particular form of treatment, you should be careful to subject opinion to circumstances as they may develop themselves in the sick room."

In the chapter on manual labor, he gives the following excellent advice, the importance of which can not be too strongly impressed upon the minds of medical practitioners:

"It is a great principle in midwifery—one to be kept constantly before you—*not to delay action until the mother and child are sacrificed, but to exhibit the aids which science will enable you to do opportunely, and in time to save human life.* What would be your judgment of the navigator who, in disregard of the fearful storm, should remain perfectly passive, and awaken to a consciousness of peril only when his noble vessel had fallen a wreck to the howling tempest. The parallel is perfect, so far as duty is concerned, between the captain, to whom is entrusted the safety of his ship, and the medical man, who has in custody the life of his patient."

We have no hesitation in expressing the opinion that this treatise should be in the hands of every physician and student of medicine in the country. Taken as a whole, it has no superior, and few, if any, equals in any country. It is by far the best American work on Obstetrics extant; and should, in our opinion, have precedence over the numerous reprints of foreign authors, which, for the last few years, have flooded our country. The author is one of the most industrious men in his department. Progress is plainly written on every page; the suggestive character and style of the author renders the book peculiarly attractive to those who think, and when occasion requires act, for themselves. Although respecting the opinions of those who have gone before him, he is not satisfied with being a mere follower in their footsteps. Although conservative to a certain extent, he does not allow his caution or timidity to influence his opinion, or prevent interference where hesitation would be dangerous and inaction fatal. Whilst raising his voice against ignorant and criminal operative manipulations in cases not requiring manual interference, he, like West, zealously and earnestly inculcates the importance of assisting nature, where the natural efforts are inadequate, before fatal exhaustion dispels all hope of a successful issue. His high tone and manly remarks against routinism, should find a response in the mind of every intelligent practitioner.

The book is gotten up in good style.

For sale by Rickey & Carroll. Price, $5.00. J. B. S.

Braithwaite's Retrospect.—Part Forty-Sixth of this well-known reprint is on our table from the house of W. A. Townsend, 39 Walker Street, New York. We are very glad indeed that this valuable publication continues to appear with regularity, and is still so richly freighted with choice abstracts from the literature of the journals. Half-yearly parts are now sold at $1.25 each, a slight advance in view of the pressure of the times on medical publications and the advance in printing materials.

The London Lancet.—The American reprint of this standard journal, by Mr. Herald of New York, is one of the most sterling publications of the day. We should scarcely know how to get along without it. The numbers for the current year are promptly received.

Editor's Table.

The Army Medical Corps in Congress.—It will be remembered by our readers, that quite recently we published the Report of Surgeon-General Hammond in full, with some remarks of approval. Several very important suggestions were embodied in that report; most of them, we feel convinced, should have received the prompt sanction of such congressional legislation as was needed. Some of them were, perhaps, of doubtful propriety, or at least would well admit of a reasonable difference of opinion.

In various shapes this vitally important question of the reform of the medical department of the army has been before Congress, and without exception, we believe, all propositions have been voted down. Furthermore, (we feel mortified to record it,) there has been exhibited in the attendant debates, a bitterness and a perverse ignorance of matters connected with this subject, on the part of our national legislators, that is shameful and inexcusable.

In a recent number of the *American Medical Times* (N. Y.), we find a very well timed editorial, so fitting that we quote it entire:

Increased Rank in the Army Medical Corps.—The recent debate in the U. S. Senate on the Medical Reform Bill elicited a degree of opposition to improvements and additions to the medical staff of the army quite unaccountable. The most reasonable and necessary requirements of the department were treated with manifest indifference, while the recommendations for greater power and higher rank were received with scorn and even contempt. The proposed enlargement of the medical corps, in order to meet more adequately the daily increasing service, was met with the cry of economy. The shallow idea of economy which govern our legislators was thus rebuked by a representative: "We give freely when we are asked to appropriate millions of dollars for the construction of useless canals, but a proposition to supply the crippled soldier with an artificial limb is defeated on the score of economy." "Whenever," said Senator Wilson, "we have asked for an increase of the force necessary for the proper organization of the army, of the medical department, or the other departments of the army, we have been met by a stern resistance here. Sir, if at once the proper officers, with the proper rank, and the proper salaries, had been promptly appointed and performed their duties, they would have saved tens of millions of dollars to this country." He should have added, what is of infinitely greater importance, that they would also have saved tens of thousands of soldiers from lingering sickness and premature death. Senator Harlan very aptly said of the proposed addition to the medical corps: "It will necessarily involve a very large expenditure of money, but then it will be an expenditure in the right direction."

When the debate finally touched upon the proposition to give higher rank to certain medical officers, Senator Wilson, Chairman of the Military Committee, thus briefly, but forcibly, set forth the importance and reasonableness of the measures:

"The fifth section provides that the chief medical director of departments and armies in the field, and the senior surgeon on duty in the Surgeon-General's Office, regularly so assigned by the War Department on the detail of the Surgeon-General, shall have the rank, pay, and emoluments each of a colonel of cavalry. The surgeon at the head of the Army of the Potomac has the same rank as the surgeon of a little regiment of two hundred. The one has the responsibility of taking care of a couple of hundred men; the other has the responsibility of superintending and directing all the surgeons in that great army; and this section simply provides that the surgeon at the head of a department, or at the head of an army in the field, shall have this promotion. It seems to me that a surgeon at the head of a large army in the field, who has the direction of all that concerns the medical department of the army, should have a higher rank than the surgeons in the regiments that compose the army. He has vaster responsibilities, and he has greater expenditures. If Senators think the rank of colonel too much, then make it a lieutenant-colonel; but it appears to me to be wrong that the surgeon at the head of a large army should have simply the rank of the surgeon of a regiment. Sir, the Surgeon-General of the British army of one hundred and fifty thousand men is a major-general, and the British army has six or eight other surgeons who are brigadier-generals. They have thirty surgeons who enter the field as lieutenant-colonels, and when they have been there three years become colonels. For their little army of one hundred and fifty thousand, about as large as the Army of the Potomac, they have got a major-general and six or eight brigadier-generals, and thirty colonels, in the English medical department. Sir, I do not stand here as a special friend of the medical department of the Army. I think this indiscriminate censure we so often hear is undeserved. A great number of these men toil night and day with fidelity to their profession and to the country, and I think they are entitled to the same consideration that other men who serve their country faithfully are entitled to."

But, notwithstanding this manly and truthful appeal, Senators gave utterance to opinions betraying a degree of ignorance of the wants of the army, and of prejudice against a most laborious and self-sacrificing corps of officers, unworthy of American Legislators. Senator Hale "denounced the idea of Surgeons having any rank at all." Senator Fessenden petulently remarked:—"I am very glad that there is one section in this bill—I believe it is the only one—which does not propose to relieve the sick and wounded soldiers by increasing the pay and rank of the Surgeons." Senator Rice declared he would vote against this bill because the officers in the different governmental departments were so ignorant of their duties. "There is not a department in the army," he alleged, "that is not here asking for an increase of major-generals, or brigadier-generals, or clerks, or colonels, or majors, or captains," and this was to him a sufficient reason for refusing to favor any measure designed to give greater efficiency to the medical department. Senator Wilkinson, who moved that the section giving rank and pay to medical officers be stricken out, said "he had noticed, ever since the war commenced, that whenever there was a desire on the part of some men to get a larger salary than anybody knew anything about, they were anxious to get the pay of captain, major, or colonel of cavalry." Therefore he proposed to set about reform, by refusing to give medical officers any increase of rank or pay.

With such trivial arguments the section was defeated, and the bill passed, thoroughly divested of every useful provision. It is humiliating to read this ill-digested debate, as it betrays such a wanton trifling with the health interests of the Army. While the Government holds the medical department strictly accountable for the health of the soldier, it withholds the means and necessary measures for accomplishing this object. This war has already demonstrated the power of the medical staff to mantain the thorough efficiency of armies when properly sustained by those collateral aids which rank always gives. Rank is not more the right of the Surgeon than a means of greater efficiency. In whatever light, then, the proposition to increase the rank of Surgeons is viewed, to the intelligent and humane mind it will be conceded to be just and necessary.

In this connection, however, we must bear our testimony against

one of the pet measures of the Hon. Senator Wilson. We al
his proposition to commute hospital rations at thirty cents, ins
the present rate of fourteen. With proper management, the
rate is sufficient (abundantly so, if in our large cities the gas l
paid by the commissary, as heretofore) — amply sufficient,
that is needed to supply our sick soldiers with food, care and
cies. Had Mr. Wilson's bill been passed, there would ha
opened up the grandest field for swindling the government, t
history of this war, rich as it is in swindling, has yet known.

Medical College of Ohio—Session of 1862–63.—At the publ
mencement, held on the 2d day of March, 1863, the degree of
of Medicine was conferred, by Flamen Ball, Esq., President
Board of Trustees, on the following candidates, who had c
with the rules of the institution: C. Berlin, Ohio; D. B. Be
tucky; Hanson A. Rodman, Ohio; J. B. Brown, Illinois;
Bryant, Ohio; R. H. Byrnes, Ohio; J. S. Clippenger, Ohio;
Driscoll, Ohio; C. S. Evans, Indiana; J. S. Carver, Ohio
Geehart, Ohio; J. B. Hull, Virginia; J. Huber, Ohio; J. E.
Ohio; R. C. C. Jones, Kentucky; C. Kearns, Kentucky
Knouff, Ohio; A. J. Miles, Ohio; J. W. Mock, Maryland;
fenberger, Ohio; L. B. Power, Ohio; Wm. Ritcheson, Ohio;
Robbins, Indiana; T. M. Rogers, Illinois; T. C. Smith, India
S. Stansbury, Ohio; J. B. Webb, Ohio.

The address to the graduates was delivered by Prof. L. M. I
The next regular session for graduation commences on the 1

The Journal of Materia Medica.—This monthly, conducted
eral years past by H. A. Tilden, of New Lebanon, New York,
continued with the completion of the year 1862. The financ
barrassments of the country, together with the largely incre
pense of publishing, are the reasons for the suspension.

Marsh, Corliss & Co.—This well known establishment h
removed from No. 5 West Fourth St., in this city, to No.
Fourth St. The new rooms which Mr. Corliss has just had f
for his truss, bandage and mechanical applications, is well su
the purpose; and from the appearance of things, our friends
establishment are in a condition to give the best satisfaction.
be remembered also that Marsh, Corliss & Co. are Cincinnati
for the artificial limbs of B. F. Palmer.

Boston Medical and Surgical Journal.—Dr. James C. White has been added to the editorial corps of this old and valued exchange. We welcome Dr. White to the editorial fraternity with pleasure.

Medical Lectures.—We have heretofore announced in general terms that each of our schools in this city would give a course of lectures this spring, granting diplomas at the close of the session. In the present number of the *Lancet and Observer* the regular announcement of the Medical College of Ohio is given, in which it will be observed the course commences on the 16th inst.

Dr. S. D. Townsend, who has been one of the surgeons of the Massachusetts General Hospital for more than a quarter of a century, retired from his honorable connection with that hospital recently, by resignation. Dr. R. M. Hodges is appointed his successor. The Board of Trustees passed highly complimentary resolutions on the retirement of Dr. T., and requested him to sit for his bust or portrait.

Sad Accident in Toledo and death of Dr. David L. Briggs.—A large block of buildings were consumed in Toledo on the 7th of February, accompanied by falling of walls, by which a number of lives were lost. Amongst them was one of the most prominent physicians of that city, Dr. David L. Briggs. At a meeting of the Toledo Medical Association held that day, suitable testimonials of respect were adopted, and honorable mention made of the deceased by his fellow members.

LITERARY NOTICES.—*Harper's Monthly Magazine.*—We have often expressed our surprise how so much good reading matter and such profuse illustration can be afforded by the publishers of *Harper's Monthly* for so small a sum. It still continues its monthly visits to our sanctum, and is the most popular family magazine in the country. Price, $3.00 to single subscribers, and to be had of all booksellers.

Godey's Lady's Book.—In spite of financial disturbances, and the paper panic, Godey is prompt, *always* prompt, and distances all competition, whether in the character of his publication or its price. The engravings alone are worth more than the entire cost of the year's subscription. The engraving for March, which is already on our table, is a gem. Single subscribers, $3.00.

The Atlantic Monthly is regularly on hand. We call it the ablest literary magazine in America. We doubt if any foreign magazine of its character surpasses it—we know of none. Price $3.00 per annum.

The American Medical Association.—We learn from the *American Medical Times* that the New York State Medical Society at its late session recommended that the American Medical Association should hold its annual meetings, notwithstanding the present war.

Death of Dr. George P. Camman.—This distinguished member of the New York Faculty died at his residence near New York city on Saturday, Feb. 14th ult. He was an ardent and accurate student of pulmonary and cardiac diseases, and was regarded by his professional associates as one of the brightest ornaments of the profession of the country.

A Public Anatomical Museum.—It appears that a public Museum of Anatomical Preparations has been opened in London. One of the London medical journals comments upon the nature of the exhibition as follows:

> This institution we have visited, and commend it to the notice of—the police. As an outrage on public morality it can not be surpassed. A filthy catalogue details the character of the preparations and the merits of the author, which are fittingly discussed together. So long as such "museums" were confined to the neighborhood of their models, rogues and prostitutes were free to enter and contrast their ailments with each other, and compare them with the wax impressions their fraternity had supplied. Though the evil was great, yet its influence was, with few exceptions, limited to individuals hackneyed in the ways and familiar with usages of vice. Occasionally inexperienced strangers were induced to enter. They ever had bitter cause to regret having done so. In the majority of instances, the proprietor either possessed or suborned qualifications not within the control of our Colleges. These exhibitions, constituting moral plague-spots in the metropolis, assumed an air of pseudo-science which removed them from the category of the uselessly obscene. Though this could not prevent disgust, it yet procured toleration. English medical men had happily hitherto abstained from the extreme degradation of their connexion. It was believed, whether rightly or wrongly, that certain restrictions were exercised in reference to the general visitor. The profession and the public, by a tacit understanding, came to recognize such museums as evils incidental to the extended liberty of our social system. By virtue of toleration, and no other title, has their permissive right become established. In Dublin, where similar exhibitions were attempted, the authorities at once caused them to be closed. Here apathy has hitherto prevailed; except when some unusual act of plunder, or excessive flagrancy on the part of the advertising expert, drives a wretched dupe to bay, little attention is paid to their existence. Even then they acquire but a limited publicity. One of the parties is generally unwilling to be exposed, and the other always

anxious to come to terms, and so the fool and the rogue agree to a compromise. We can recall many instances in which, from museums similar to that by which George-street is at present degraded and outraged, poor weaklings have dated their moral and physical wretchedness.

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Army Medical Matters.

Ass't Surgeon J. B. Brinton, U.S.A., has been relieved from duty in charge of General Hospital No. 2, Frederick, Md., and assigned to Fort McHenry, Md.

Surgeon B. J. D. Irwin, U.S.A., Medical Director, Department of the Southwest, has been instructed to relieve Surgeon H. R. Wirtz, U.S.A., as Superintendent of Hospitals at Memphis, Tenn., the latter, on being relieved, to proceed to Madison, Wis., and relieve Surgeon W. J. Sloan, U.S.A., in his duties as Medical Director, Department of the Northwest.

Surgeon Ebenezer Swift, U.S.A., Medical Director, Department of the Cumberland, has been ordered to report to the Medical Director at Baltimore, for duty in the General Hospital, Chester, Pa.

Surgeon G. G. Shumard, U.S.V., has been assigned to duty at Lexington, Ky., as Medical Director of Central Kentucky.

Surgeon Henry S. Hewit, U.S.V., now in New York waiting orders, has been ordered to report to Major-General Grant.

Surgeon Clark McDermont, U.S.V., has been ordered to duty as Medical Purveyor, Department of the Cumberland, Murfreesboro. Tenn.

Surgeon T. F. Azpell, U.S.V., has been relieved from duty in charge of the Marine Hospital, St. Louis, and assigned to duty as Acting Medical Inspector, District of St. Louis, Mo.

Surgeon John Moore, U.S.A., has relieved Assistant Surgeon R. O. Craig, U.S.A, as Medical Director 5th Army Corps. Dr. Craig has been assigned to duty as Surgeon in Chief, Sykes' Division, 5th Corps.

Surgeon A. J. Phelps, U.S.V,, has been assigned to duty as Medical Director, 21st Army Corps, at Murfreesboro, Tenn.

Surgeon J. G. Holston, U.S.V., is on leave of absence at Zanesville, Ohio.

Surgeon Wm. Clendenin, U.S.V., now in charge of Emory Hospital, Washington, D. C., and Assistant Surgeon J. M. Brown, U.S.A., lately in charge of the College Hospital, Georgetown, D. C., have been ordered to report in person to the General commanding the Department of the Cumberland, and by letter to the Assistant Surgeon-General at St. Louis, Mo.

A hospital for diseases of the eye and ear has been established by the Surgeon-General, in Washington, D. C. It is under the immediate charge of Surgeon J. J. Hildreth, U.S.V.

Special Selections.

On the Application of Remedies to the Larynx with the aid of the Laryngoscope.

By Morrell Mackenzie, M.B., London, Registrar to the London Hospital.

The laryngoscope has now firmly taken its stand as an indispensable instrument in the diagnosis of throat affections. The brilliant demonstrations of Professor Czermak so completely captivated the professional mind, that a method of investigating disease, which till quite recently—in this country at least—was regarded as the dream of enthusiastic theorists, is now admitted to be at once practicable in its application, and positive in its results. At this moment, indeed, it cannot be denied that, though there are scientific instruments of more extensive sphere, there are none by which evidence can be obtained of so accurate and conclusive a kind.

The beautiful simplicity effected by Professor Czermak in the details of the laryngoscope secured the future position of the instrument which his attractive demonstrations had brought so prominently before the medical public, and though the merit of the invention has been recently claimed for our own talented countrymen, the late Mr. Avery, in this instance it must be admitted that "he discovers that proves. Honor belongs to the first suggestion of a discovery, if that suggestion was the means of setting some one to work to verify it; *but the world must ever look upon this last operation as the crowning exploit.*"

The obstinacy of internal diseases is a striking contrast to the comparative tractability of peripheral affections, (from the report recently published by the Statistical Society "On the Mortality occurring in the Metropolitan Hospitals," it will be seen that whilst the death-rate in the surgical wards was only 5·6 per cent., that in the medical wards—i. e., that of internal disease—was 12·9 per cent.,) and it is highly satisfactory to find that the progress of medical knowledge is likely to transfer laryngeal affections from the category of the former to that of the latter. As yet, however, the laryngoscope has more often testified to past ravages than prevented prospective destruction. This is partly owing to the instrument having been only so recently introduced, and partly because a sufficiently simple mode of applying remedies has not hitherto been made known. The object of the present article is to explain a method at once easy and efficacious. It consists in using the left hand for the larnygeal mirror, and then with the right hand quickly introducing the "laryngeal probang."

This instrument is simply a piece of bent aluminium wire, one-eighth of an inch in thickness, fitted into a tolerably-sized handle, and armed with a sponge, which must be firmly attached. The sponge may extend any length up the wire, but it must only just cover it at the end (on account of the danger of particles becoming separated and dropping into the trachea), and it should not be more than a quarter of an inch in thickness. The wire should be bent at an angle of 108° ; the lower part to which the sponge is attached should measure an inch and a quarter in length, and the upper part, which is inserted into a stout wooden handle, should be about five inches long. The angle, however, at which the wire is bent,—viz., 108°—is the "moment" in the whole affair. It was arrived at by measurements made on the dead subject, and by a great number of trials on different-sized throats, with probangs bent at every inclination. When Professor Czermak was in London he used an instrument provided with a large curve, instead of one bent at an angle; but the curve makes it extremely difficult to use the instrument, which, owing to its shape, instead of being plunged directly into the larynx, has to be slided gradually to the back of throat; and when the operator had got thus far, the large curve in the wire caused an immense alteration in the position of the point of the instrument when motor power is applied at the handle. For touching the vocal cords near their anterior insertion, the wire may be conveniently bent at an angle of 90° ; and for applying remedies to the mucous membrane over the arytenoid cartilages, an angle of 120° is suitable.

Nevertheless, the instrument already described is more easy to introduce below the epiglottis than where the angle is either greater or less ; and by raising or depressing the handle, the deeper or more superficial parts of the larynx can be effectually touched If it is only desired to swab the larynx or touch the under surface of the epiglottis, a stouter instrument, shorter below the angle, may be conveniently used. Aluminium is recommended as the metal best suited, both because it entirely resists the action of all remedies that can be applied to the larnyx, and because its extreme lightness renders it admirably adapted for the rapid and delicate movements which are required. The only point to be borne in mind is that, of course, all objects are reversed in the mirror; but when the anatomical situation of parts is remembered, with a little practice this difficulty will be soon overcome.

Professor Czermak has recommended a method of injections which, though very ingenious, is far from simple. The laryngeal mirror has to be held by "a *fixateur*," and hollow tubes are used for injecting. To insure accuracy, "a sight is attached to the tube;" and even then "constant practice can alone give security in aiming and touching; and it is indispensable to examine beforehand each tube separately, in order to know the manner of employment." For practice in the "*tir*," the persevering Professor recommends larnygoscopic drawings fitted into a case of the same size as the pharynx. This he illumines, and, after aiming, is able to ascertain "what accuracy of localization may be obtained." This plan of treatment may be suited for the marksman, but it is not easy for the ordinary volunteer.

The observations which preceded the immediate subject of this paper are the best proof that these quotations are not made in a spirit depreciatory of the laborious efforts of the distinguished Prague Professor, but are merely intended to impress that simplicity, which, though itself a negative quality, is the real basis of all rational therapeutics.—*London Lancet.*

On a Case of Sudden Aphonia from Cold.

Autolary Goscopy—A Circle of Redness round the Vocal Cords—Cure after Self-Application of Topical Treatment.

By George D. Gibb, M.D., M.R.C.P., Physician to the West London Hospital.

On Sunday evening, May 5th, 1861, at half-past six, I entered into one of the tramway omnibuses at the Marble Arch, and as it proved to be full, I stood in front with the driver. During the ride to Nottingham, I was exposed to the full force of a strong wind blowing at the time. On reaching a friend's house at Bayswater, and making an effort to speak, to my surprise I found my voice almost wholly gone, and had to converse in a very low tone a little louder than a whisper, accompanied with hoarseness. Next day there was no improvement, and aphonia was complete. On practicing autolaryngoscopy, which I did with facility, a circular zone of redness of the mucous membrane was observed around the vocal cords, without any apparent tumefaction. Here was the cause of the aphonia explained. Although alone and unassisted, I applied, with the aid of the larnygoscope, a sponge dipped in a solution of the argentonitrate of mercury to the interior of the larnyx. This was probably the first occasion that such a proceeding had been attempted upon oneself, and was accomplished with precision and facility, being followed by spasm and dyspnœa of about twenty seconds duration. I kept quiet during the day, and did not essay to speak. Next day there was a marked improvement in the voice and in the redness. In a couple of days later the voice was quite restored, and the larnyx had assumed its normal condition.

It is probable that had I treated another in the same condition, instead of myself, the cure would have been even more speedy; but fearing spasm, especially as I was alone, the application of the sponge was more gentle, and therefore less efficacious, perhaps, than it might have been. I may observe, *en passant*, that at the time the centre of my neck and chin were unprotected; since then the natural appendage and covering has been allowed to grow, and although sometimes exposed to even more violent winds than on that occasion, no inconvenience has resulted. This is a plea for the beard.

As to the various solutions I am in the habit of employing, a few words are necessary on the strength of those of the nitrate of silver. Solutions varying from two to four scruples of the crystals of nitrate of silver to the ounce of distilled water, will be found sufficient for most purposes, as already pointed out in my work on Disease of the Throat, Epiglotti, and Windpipe. The two-scruple solution is the most serviceable for ordinary occasions, such as introduction into the larnyx, trachea, behind the nose, or the fauces. Indeed, one of less strength than this is really trifling with the patient, as the experience of others teaches, as well as my own. One of the ablest of modern surgeons, whose opinion is entitled to very great weight—Prof. Pirrie of Aberdeen,—in the last edition of his standard work upon Surgery, says: "My own experience leads me fully to agree with Dr. Green and Dr. Gibb, that a solution of less strength than from two to four scruples of the salt to an ounce of distilled water should rarely be used; and that if the object be to arrest ulcerations upon the epiglottis or about the opening of the larnyx, a stronger solution may be employed with advantage."—(p. 793.) I am the more anxious that there should be no misunderstanding upon the point, because the impression prevails amongst many practitioners that a solution containing ten grains or a scruple is sufficiently strong for topical use, and fears are entertained of employing anything stronger. Need I say these fears are groundless? On the other hand, while advocating solutions of a certain strength, I can not too strongly deprecate the practice which prevails with some, of applying the solid nitrate, or the strongest concentrated solutions, to the mucous membrane of the throat in a state of ulceration or otherwise. A wholesale destruction of tissue is the result of this, of which the epiglottis not unfrequently comes in for its share, as well as the structures in front of the bodies of the cervical vertebræ, and which has led to exposure of the latter. The extreme delicacy and the great importance of the structures entering into the formation of the larynx, especially, should never be forgotten.—*London Lancet.*

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Painless Parturition.

Dr. George Smith, of Madras, communicated to the Obstetrical Society of Edinburgh the following example of this:

"Some years ago I was engaged to attend an English lady during her approaching confinement, and was startled one day by a hasty summons, coupled with the information that the child had been suddenly born without warning of any kind. On reaching my patient's residence, I found that the child had been born about ten minutes, and that it was still lying, with the umbilical cord uncut, close to the mother's body. The native female servant, at the lady's order, had left the child untouched, merely raising the bedclothes a little to permit the free access of air for the purpose of respiration.

"On inquiry, the lady informed me that she had been for some time expecting her confinement daily; that the previous night she had felt as usual; but that she had had occasion to rise frequently to attend upon her sick child, and that she had got up as usual about half-past five A.M., feeling well, and having no indication of the near approach of labor. Further, that during the forenoon she had walked down a long flight of steps, and across a gravelled walk to a smaller house within the enclosure of her own grounds, where, feeling a little tired, she had lain down upon a bed; that soon after she experienced slight discomfort, likened by her to ill-defined uneasiness of the abdomen under the operation of a mild laxative, followed by an impression that some solid warm body was lying in contact with her person; that she directed her servant to look below the bedclothes, and that the attendant, on doing so, found to her surprise the child entirely extruded.

"My patient assured me repeatedly and earnestly that she was quite unconscious of the whole parturient process culminating in the birth of the child, and expressed herself both surprised and alarmed at a delivery so painless and instantaneous. As she was daily, nay, hourly, expecting her delivery, it is but reasonable to suppose that she had been for some time acutely alive to the earliest intimations of commencing parturition, and it is surely remarkable that nothing occurred from which she could have suspected that the act had actually commenced. My patient had no object in deceiving me, and I am quite satisfied of the entire truthfulness of her often—to me—repeated statement.

"This case has a medico-legal significance, as well as a practical. If a female awake, in perfect health, in the exercise of sound reason, and hourly expecting her confinement, having no object for its concealment, but many reasons for its occurrence, being welcomed by her friends, can be the subject of painless, unconscious labor, preceded by no appreciable premonitory symptoms, and making itself known only when the extrusion of the child has been completed in the way described, how much more may we be inclined to yield belief to cases in which it has been averred that delivery has taken place during sleep, without waking the mother, and to others, in which it has been maintained that owing to the painlessness of the parturient process, the child's life has been lost by a fall on the ground, or by being engulfed in a latrine? The child was a female, small, but not much undersized. The mother's first labor—this was the second—was a normal one, accompanied by the usual signs, and extending over six hours in its duration."

—— Dr. Pattison stated that he had once attended a primiparous patient who suffered no pain at all during labor. He had not been summoned to the case, but happened to call at the time; the child was born quite easily, the patient only experiencing a feeling of pressure.

Dr. Wilson had once been called to see a woman who had been delivered without any pain, whilst she was walking about in the house; and he found the child lying on the floor with the umbilical cord torn across.

Dr. Cochrane thought that such a case as that related by Dr. Smith might more readily occur in a warm country with a relaxing climate. But he had himself seen a woman who had just been delivered of a child almost unconsciously as she was getting out of bed.

Dr. Andrew Balfour stated that he had attended, when in China, the wife of an engineer on board a steamer, who suffered from remittent fever in the eighth month of her pregnancy. The whole ovum in that case was expelled entire without any warning; and when he (Dr. B.) arrived and ruptured the sac, the fœtus was already dead.

Dr. Pattison said Dr. Thatcher used to tell his class of a case where he found the patient had been delivered of an entire ovum with unruptured membranes. Dr. T. had been summoned by the husband, who was in great dismay, because, as he averred, his wife had given birth to a "leg of mutton."

Dr. Alex. R. Simpson stated that Von Ritgen, the venerable professor of midwifery at Giessen, had told him, that in a long course of his practice he had met with no less than seventeen cases of labor where the patient had experienced none of the ordinary labor pains; and he (Professor Von Ritgen) had been led to form the conclusion that in perfectly natural labor, pain should not necessarily be experienced, and that we had come to regard pain as a natural and necessary concomitant of labor, merely because women were almost never in a perfectly healthy condition when we were summoned to aid them during parturition. He (Dr. A. R. S.) thought that if Professor Von Ritgen's position could be established—and the facilities of parturition among savages went far to prove its truth—then the objection sometimes made to the use of chloroform in labor, on the ground of its being contrary to nature, would be most completely done away with.—*Ed. Med. Journ.*, Nov., 1862.

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Clinical Remarks on Polypi of the Uterus.

By Dr. Tanner, of King's College Hospital.

J. W——, aged thirty-four, applied as out-patient in September, 1861. She stated that she was single, and got her living as a needlewoman. For six months she had been suffering with a discharge of blood from the vagina, scarcely being free for a single day. Her anæmic appearance made this statement quite credible. She had had advice from two surgeons, who had administered some acid medicines, but these exerted little or no effect upon the discharge.

Upon making a vaginal examination, a small polypus was detected protruding at the os uteri. It was readily drawn down and excised, when it was found to be of a fibrous nature, and of about the size of a filbert. The bleeding ceased, and the patient soon regained her health under the influence of steel.

At the same time two other patients were under Dr. Tanner's care, suffering from uterine polypi. In one instance, the presence of two small mucous polypi on the anterior lip of the uterus caused excessive menorrhagia, the monthly flow continuing for ten or twelve days, and being attended with the formation of considerable clots. They broke down under the pressure of a pair of forceps, but were thoroughly destroyed by nitrate of silver. The symptoms ceased, and recovery followed. In the second case the uterus contained a large polypus, the size of a child's head at the full term of pregnancy. The os uteri was open, so that the tumor was distinctly appreciable, while, on making an abdominal examination, the enlarged womb could be felt extending almost to the umbilicus. Yet in the case of this large growth no inconvenience was felt beyond a sensation of weight and an excessive leucorrhœal discharge. The catamenia were regular, and only lasted for four days; and though she had experienced some few attacks of flooding, yet she had been quite free from anything of the sort for eleven months. She positively declined allowing any attempt at removal, and would neither enter the hospital nor lay up at home. She only wanted "the whites" to be checked.

Now these cases offer a marked contrast, and prove that the hæmorrhage from a tumor of the uterus is by no means always proportionate to the size. Dr. Tanner remarked that he has notes of many private cases which prove the same point. These cases, in respect to the urgency of the symptoms produced, offer some analogy to vascular tumors of the female urethra. Dr. Tanner has long since noticed that the larger the growth the less urgent are the symptoms produced by it. Thus, a tumor the size of a large pin's head will give rise to so much suffering that the patient feels life a burden to her; while a growth the size of a small flattened bean gives no indication of its presence. In examining old women suffering from procidentia uteri, it is not at all uncommon to find a large vascular tumor at the mouth of the meatus, which is almost invariably asserted to give rise to no inconvenience, and which is not at all tender to the touch. At the same time it is not pretended that any rule can be laid down from which the size of a polypus may be diagnosed by the amount of hæmorrhage which it induces. Every physician meets with cases where large polypi produce excessive hæmorrhage, which nothing will cure but the removal of the tumor.—*London Lancet.*

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Remarks on Nitrous Oxide and Oxygen.

Messrs. Editors.—Being much pleased with the attention lately given to the use of gases as remedial agents, I wish to offer, through your journal, the results of some personal observations on the subject.

While working amongst nitrous oxide vapors, some years ago, I noticed that the color exhibited by a scratch on the arm soon changed to a dark purple, almost inky hue, while upon the same person, a few hours before or after, no such result was obtainable.

Was not the difference due to some lower oxide of nitrogen than those which irritate the fauces when inhaled; and if so, was not its action poisonous? Will not such chemical reaction with the blood or some of its elements account for the fatal results of some of the cases reported?

That nitrogen, combined with oxygen, will enter into such reactions readily where free nitrogen will not, and that nitrogen plays an important part in the formation of organic poisons, are points too well understood to need comment here.

Again: These vapors, when freely imbibed *on a full stomach*, acted like a small quantity of vapor from the decomposition of cyanides, producing with its contents a mass of mucus-like matter, smelling strongly of some modified form of the respective gases. The oxides of nitrogen thus taken induced emesis in the course of a few hours, thus preventing the action upon the food from being so complete as in the case of cyanogen, which was in one instance retained forty-eight hours.

On an empty stomach, unpleasant effects, reminding me of the pain sometimes felt under like circumstances during the cholera epidemic,

l me from entering into close investigations. Notwithstanding
ses may occur in which the introduction of nitrogen into the
will be desirable, and in such cases it will doubtless be more
assimilated if given in connection with oxygen, as in the
oxide.

ay be added here, that as a hue tending to black indicates ex-
carbon in the blood, so a more purple hue may indicate excess
ogen, both calling for oxygen as a restorative.

of the ablest physicians of Mississippi informed me that the
uantities of supercarbonate of iron he directed were intended
s a means of conveying oxygen into the system, and he often ex-
ed difficulty in giving as much as he desired, on account of the
ve action superinduced mechanically by the deoxidized iron,
ig that a portion of the metal was entirely deoxidized in some
Another Southern physician once made some similar observa-
ı regard to the muriated tincture of iron, although, if I remem-
htly, he wished mild purgative action to follow its adminis-

r is it that of those who have opportunities for doing so, no
s tried oxygen in simple mixtures of various proportions with
n or atmospheric air? Is it because of the difficulties in pre-
and conveying it; or only for want of thought? It appears
hat the well-known healthful, vitalizing properties of oxygen
have attracted the attention of those who have been experi-
g with ethers of various kinds, quite as much as any remedial
f a less natural character. All know its power as well as its
ous character, and injury can result from its use only when too
dministered, or when a deficiency of carbon in the system, as
umption, may occasion its combination with other elements in
ues, thus leading to the destruction of the tissues themselves.
w me to call attention, in this connection, to the remarks upon
s pulmonalis, in your issue of Jan. 22d, by Dr. Amos Sawyer,
ois; all the points presented by him being supported by my
servations, both near the Atlantic coast and in the Southwest-
tes. And, further, I would venture the opinion that a warm
ceous diet, combined with constant and vigorous out-door ex-
will cure any "consumptive" able to bear such exercise.
ch a diet, unless accompanied by at least as much exercise as
necessary to sustain a hearty appetite, will be very likely to
wed by some ill effects; and in some, especially those using
an article of food, much more severe exercise in the open air
requisite.

ibly, actual experiment may demonstrate that the artificial ex-
ı of oxygen in the sick room, in connection with such a diet,
the means of saving consumptive patients; but for obvious
, before alluded to, great care will be requisite in opening such
e. Yours, very respectfully,

An Ex-Southern Apothecary.

m *Medical and Surgical Journal.*

Statistics and Assays of "Virgin Scammony."

BY EDWARD R. SQUIBB, M.D., BROOKLYN, N. Y.

Scammony may be easily obtained in the ordinary drug market at prices varying between fifty cents and eight dollars per pound, and is occasionally met with at nine to twelve dollars per pound. The so-called "virgin scammony," however, in several varieties as "Tchangaree," "Beybazar," etc., ranging between six dollars and fifty cents and twelve dollars per pound, is confined to a few importers, and is not always to be found in quantity. During the years 1860 and 1861, and the first half of 1862, at least one thousand pounds of "virgin scammony" were met with in the New York market, and carefully examined by the writer, the results being noted.

It generally occurs in soldered square tin boxes, containing twenty-five to twenty-eight pounds each, four such boxes being packed in a wooden box for transportation. Occasionally, however, it is seen in round wooden boxes or drums of a similar capacity. The scammony is in irregular, rough and fissured masses of various sizes, sometimes porous, but commonly solid, hard and semi-resinous, having a tough, dull fracture. It is of a very dark grayish green color internally, often nearly black, but more of an ash color externally. It is rarely dry enough to be pulverulent, yet still more rarely too moist to be rubbed into coarse powder, and it generally loses six or seven per cent. in drying sufficiently to make a fine powder. The amount of moisture is, however, very variable, and thus has great influence upon the percentage of resin.

The appearance of this scammony is tolerably uniform, and it has not a single sensible property which can be relied upon as indicating its true value. The usual mode of assaying it is to select a specimen, rub it to powder, weigh the powder, wash it two or three times with ether, dry and weigh the residue, and having subtracted its weight from that of the powder, to call the remainder resin of scammony. This method is not only very inaccurate, but is fraudulent in the results, because all the moisture is knowingly stated as resin of scammony. It is, however, still used to sell by, despite of a knowledge of its inaccuracy.

The method of assay used by the writer, and believed to be simple, easy, and practically accurate, is as follows: Take a very small piece, from one-third to one-half of the lumps of the package, and a little of the dust that is rubbed off by attrition during transportation, and found at the bottom of the box. Powder the whole of this sample, and pass the powder through a small sieve of coarse bolting cloth. If only that portion of the powder which first and most easily passes through the sieve, be taken, a false result will be obtained; or, if the sample be allowed to lie for a day or two, either powdered or unpowdered, before being weighed off for the assay, the results will be inaccurate from loss of moisture. Mix the whole powder thoroughly, weigh off from it five grammes, put this into a vial of the capacity of

50 cubic centimetres, (29.52 c. c. to the f. ℥,) fill the vial two-thirds full of strong ether, cork and shake it well, and then allow it to settle until the solution becomes clear. Decant the clear solution as closely as possible into a tared capsule, fill the vial again with strong ether, and proceed as before. Repeat this washing with ether a third time, and having collected the clear solutions in the capsule, evaporate them to dryness, and carefully heat the residue in the capsule in a hot air bath to somewhat over 212°. When cold weigh the capsule and contents, subtract the tare and note the remainder as resin of scammony, if the scammony be not adulterated with any other resin. The rule of simple proportion will then give the percentage of the resin, and consequently the true value of the scammony.

Within the period before mentioned, thirty-four packages of "virgin scammony," representing more than one thousand pounds, have been assayed by the writer. At least one-third of the whole number of these parcels were purchased by the writer upon the assays made, and the resin extracted for making compound extract of colocynth; and in these cases the results of the assays were commonly found to be from one-half of one per cent. to one and a half per cent. too low. This may be accounted for by the extraction on the large scale having been made with 95 per cent. alcohol instead of ether, while the general results show the practical accuracy of the method of assay.

No. Assay.	Perct. Resin Scammony.	No. Assay.	Perct. Resin Scammony.	No. Assay.	Perct. Resin Scammony.	No. Assay.	Perct. Resin Scammony.
1	33.3	10	58.3	19	58.5	28	63.7
2	54.9	11	28.9	20	47.0	29	68.8
3	57.0	12	31.8	21	79.7	30	45.8
4	33.5	13	29.7	22	28.8	31	42.6
5	56.0	14	32.2	23	30.3	32	31.7
6	57.1	15	30.0	24	29.3	33	48.6
7	72.1	16	32.4	25	30.5	34	25.0
8	65.9	17	41.6	26	73 1		
9	58.0	18	27.9	27	62.4		

The assay No. 7 was from a box imported at the special request of the writer, without limitation in price, and cost here twelve dollars a pound.

The assay No. 21 was from a special importation of four boxes, without limitation of price that the writer is aware of. The quantity was 110½ pounds, and the cost was $10.75 per pound. This quantity required 60 gallons of 95 per cent. alcohol to exhaust the powder, and yielded 87½ pounds of resin of scammony. Taking the cost of drying and powdering the scammony, the labor of extraction, the cost of materials used, and an estimated wear and tear of apparatus, etc., the net prime cost of this resin was $14.21 per pound, or about 89 cents per ounce. This is about the average cost of the resin, but is obtained with less trouble the higher the grade of the scammony. It is, therefore, more economical to buy the higher priced scammony.

The regulations of the Treasury Department, under the Act of Congress of 1848, "To prevent the importation of adulterated and spurious drugs and medicines," specify that "scammony, when affording 70 per cent. of pure scammony resin," is alone entitled to entry into the United States. See "Regulations under the Revenue Laws, 1857," published by the Treasury Department, p. 158. From this it appears that while it is legally impossible to have in scammony in this market below 70 per cent., yet that in fa three samples out of thirty-four, representing one hundred a pounds out of a thousand, could be found within a period of t a half years, which really came up to the legal standard ; and these, representing one hundred and twenty-five pounds, were importations to order, and would not otherwise have com These facts constitute a severe criticism upon the way in which law" has been executed with regard to a very important dr one which is very easily tested. The facts also show that whe scammony is wanted, it can, under ordinary circumstances, be o at a price nearly corresponding to its true value.

These facts also show conclusively what degree of therapeut formity is to be expected from the use of the best grades of sca to be found in the market ; and the propriety of the step taken Committee of Revision of the Pharmacopœia in substituting r scammony for scammony in the officinal compound extract c cynth. The scammony of the forthcoming revision of the Pha pœia is required to contain not less than 75 per cent. of resin o mony to entitle it to be considered officinal.

It appears extremely probable that in the countries where scan is produced, there is a kind of standard of adulteration, as in stance of opium, and perhaps other drugs, whereby it is kept the limits of 45 to 65 per cent., and that higher and lower gra produced to order, or, which is the same thing in effect, to s price limitations which are almost invariably sent out with the of the importers.

The statements of the best authorities concur in giving for tl crete juice of the living scammony plant, when properly dried, portion of resin varying from 80 to 92 per cent., and it is probable that the importers could, if they would, obtain the c this condition.—*Proc. Amer. Pharm. Asso.*, 1862.

Brooklyn, August, 1862.

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Parisian Medical Intelligence.

I have already, on more than one occasion, epitomized for th fit of your readers, specimens of the French *eloge*, and none wit pleasure and confidence in their sincerity than those delivered present perpetual secretary of the Academy, M. Dubois d'A M. Dubois' panegyrics are not always mere flattering retro pages of compliments tinted *couleur de rose ;* but real history, t always, but reproducing shade as well as light. The *eloge* of a brated a man as Thenard, the chemist, deserves some mentic more so, as among the general medical public in England it i known how frequently the great lights of our profession in have risen from the ranks. Louis James Thenard was born at tle village of Louptiere, in the department of the Aube, on the May, 1777. His parents were agricultural laborers. After re a solid education at the College of Sens, at the age of seventeen, Thenard came to Paris, and first entered the laboratory of Vauquelin, the celebrated chemist of that day. Chemistry at that time, the end of last century, was in the infancy of that new life breathed into it by Lavoisier. After having established the doctrine of the simple and compound nature of bodies, Lavoisier had shown that in order to reach the real basis of chemistry, it was necessary to ascertain what were elementary and incapable of decomposition. "The indecomposible" thus became the philosopher's stone of the modern savants, and this stone is all the more precious because upon it, as a foundation, reposes the whole edifice of chemistry. Thenard commenced his chemical labors in real earnest towards the beginning of this century, and for more than fifty years devoted his whole energy to science. In co-operation with Gay-Lussac, he followed in the wake of Davy, and cleared up many of the difficulties still connected with the extraction of the metallic elements. His lectures at the Polytechnic School, at the Faculty of Sciences, and at the College of France, were largely attended; and as a teacher his method of instruction, combined with a peculiarly happy talent for manipulation, made him remarkably popular. Although he had been accused of harshness to his inferiors, almost every act of his life disproved this first impression of his character. When, as chemical demonstration at the Ecole Polytechnique, he received his first half year's salary of 600 francs, a large sum for the poor professor at the outset of his career, the use he made of his first earnings was, to send the whole to the poor village cure who had directed his early studies. One of the last acts of his life was likewise a work of bounty—namely, the creation and endowment of a charitable fund for scientific laborers, and to this work he devoted all his energy and thought. He died venerated and honored by all, at the age of 84, in July, 1857. The medical obituary of France during the last four weeks has been unwontedly crowded, and the hand of death has been unusually busy in this capital. The hospital staff has experienced two very great losses: such men as Robert, late surgeon of the Hôtel-Dieu, and Jamain, author of several surgical works, can ill be spared, and their loss leaves a gap in the ranks not easily filled up.

At the Academy of Sciences several papers of considerable medical interest have been brought forward. In one, M. Delbruck, after referring to the well-known physiological fact, that animals require a far smaller supply of air during sleep than when awake, reasons that the natural method for the production of sleep is the diminution of the quantity of air respired. In another, the operation of evacuating the aqueous humor is extolled by M. Sperino, of Turin, as a panacea. "Not only," says this surgeon, "do I recommend this practice in cataract, dropsy, and inflammation of the eye, but also in glaucomas, staphyloma, choroiditis, and the different kinds of amaurosis."—*London Lancet.*

Editorial Abstracts and Selections.

PRACTICAL MEDICINE.

1. *Veratria in Rheumatic Fever.*—In a clinical lecture recently delivered by M. Bouchut, at the Hôpital Ste. Eugènie, the employment of veratria in the treatment of rheumatic fever in children is strongly advocated. M. Bouchut, whose opportunities for testing any novel method of medication are so extensive, comes forward with thirty cases of acute rheumatism, in which veratria has proved sufficient for the cure of the malady in from three to twelve days, the amelioration setting in on the second or third day of its administration. One of the most remarkable effects of the action of veratria in rheumatic fever is the rapid fall of the pulse; whatever its frequency, the diminution under the use of this drug is most marked, the pulse falling to sixty, or even fifty, becoming almost thready and imperceptible, without causing to the patient any feeling of malaise. This abatement of the circulation M. Bouchut considers as the signal for the diminution of the doses. With regard to the effect of veratria on heart complications, this is probably indirect and due to the annihilation of the rheumatic poison. Besides its influence on the pulse, this medicine may, if given in too large quantities, irritate the mucous membranes, and produce vomiting, diarrhœa and colic. The doses should therefore be small, and the ordinary formula recommended is, veratria and extract of opium one grain each, to be divided into ten pills, of which two pills are to be given the first day, three the second, four the third, five the fourth, and so on, increasing one pill each day until the condition of the pulse or the irritation of the mucous membrane compels a diminution. The difference of price, in hospital practice, between the use of veratria and that of sulphate of quinia, is of course one point of comparison in which the advantage remains very decidedly with the former; add to which, in a therapeutical aspect, veratria is perfectly innocent of those charges of exciting rheumatic determination to the membranes of the brain, which in some measure appear to have been justly adduced against quinia since the employment of large doses of this drug has come into fashion.

2. *The Permanent Voltaic Current as a Therapeutic Agent.*—Dr. Hiffelsheim has published a work ("*Le courant Voltaique continue permanent,*" etc.,) which contains an account of his important researches into the effects of "dynamic" electricity upon the body. The following are the most important conclusions: 1. It is not desirable, except for the purpose of *cauterization,* to employ any voltaic combination of which the metallic elements present large surfaces, for such an apparatus produces a current too strong and disorganizing. The surface of the zinc element should not be so large as eight-tenths of a square inch, at least with any more powerful exciting liquid than pure

water; but the number of elements of the pile must be increased, in order to overcome the resistance of the tissues. 2. It is desirable that the passage of the current should be as little felt *by the skin* as possible. M. Hiffelsheim recommends that the conducting plates which are applied to the surface of the body should be gilded, and that they should not be kept moist as was formerly recommended. 3. The current, imperceptible by the skin, may be appreciated by the interposition of a voltameter, in the course of the circuit; and the author prefers for this purpose an apparatus for the decomposition of water. The amount of voltaic action may be computed, either by estimating the quantity of hydrogen produced, or the quantity of water which has disappeared, in the twenty-four hours. A current, thus carefully graduated, may be continuously applied during the greater part of each twenty-four hours, and its action in this respect is much more efficacious than that of ordinary "continuous" currents, which can only be applied for a short time.—*London Med. Rev.*, Oct., 1862.

3. *Rheumatic Pericarditis and Endocarditis.*— Dr. Joseph Bell, Clinical Lecturer, Glasgow Royal Infirmary, has published (*Glasgow Med. Journ.*, April and July, 1862) some interesting practical remarks on the diagnosis and treatment of rheumatic pericarditis and endocarditis. From the facts and reasonings adduced in that paper he makes the following conclusions:

1st. That when the physical symptoms either of pericarditis or endocarditis become manifested in a case of rheumatic fever, we are entitled to infer that these diseases exist, irrespective of the absence of the general or constitutional symptoms which usually attend the idiopathic forms of these diseases.

2d. That we are justified in considering that the effects are capable of being removed, and are therefore amenable to treatment.

3d. That those remedies which are calculated to remove congestion and promote absorption, form the proper therapeutic agents; and that of these bleeding, mercury, and iodide of potassium, are among the most powerful and useful.

4th. That when the action of the heart becomes enfeebled in consequence of effusion into the pericardium, the free use of stimulants becomes absolutely necessary.

4. *Use of Malt and Beer in Therapeutics.*—Malt has been long since used in Germany, and particularly in Berlin, as a popular remedy for bronchial catarrh and dyspepsia. It is, however, not more than a year since the German physicians began to prescribe it after Itustendt, who first announced its advantages.

In France, brewers were accustomed to use a tisane of malt for bronchitis and rheumatism, and lately Dr. Frémy has tried this therapeutic agent for many months on patients on the Beaujon Hospital.

Dr. Frémy received direct from a Berlin brewery the medicinal preparations of the beer, the powder of malt and the malt beer, and with these he made his experiments. According to comparative analysis by Chevrier, essential differences exist between such malt and that in use at the Paris breweries. In the first place, the Paris malt shows no trace of diastase, while that of Berlin contains forty-five centigrammes in every thousand grammes.

The latter also contains a considerable quantity of lupuline, of which there is no trace of the former, as well as a portion of cane sugar, which renders it more pleasing to the taste. We must consequently conclude that the method of preparing such malt is different from that followed at Paris. The malt beer is its concentrated essence. It has the taste of certain English beers, such as Scotch ale, is tolerably frothy, and very aromatic. The malt is taken in the form of a hot decoction, and may be mixed with milk. The beer may be taken hot or cold, and at dinner.

Frémy experimented with malt in that hopeless disease, pulmonary tuberculosis. Of sixty-four phthisical patients submitted to the remedy not one was cured. Five of them left the hospital so considerably improved that they believed themselves well, but auscultation proved that the cure was far from complete. In the remainder, the local state continued as before, the phenomena of ausculation remained unaltered; while in both cases the general phenomena of phthisis, viz., perspiration and diarrhœa, were modified for the better. But if, in decided phthisis, malt gave equivocal or no results, it was otherwise in suspected pulmonary catarrh, in incipient tubercles, in which cases it was employed with success.

A man of 25 years of age had a cough for many years, had visibly become thin, and upon auscultation and percussion presented clear signs of tubercular deposit on the apex of the two lungs. He had derived no benefit from the use of cod-liver oil, nor from any other of the usual remedies, when, by Frémy's advice, he was treated with beer and powder of malt. After two months of this treatment, it is attested by Frémy, that his cough had disappeared, respiration was more fully performed; the resonance had become less obscure; the murmur gentle and equal; his appetite was excellent; his strength and flesh had returned.

The decoction of malt produced the highest benefit in febrile bronchitis with hoarseness, and the symptoms were sometimes subdued in forty-eight hours. It was equally useful in chronic pulmonary catarrh, and especially in those which produce grave dyspeptic accidents in old people. The malt in these cases rapidly excited the digestive powers, and cured the bronchitis. In dyspepsia, also, it was no less successful, after the gravelly complication had been removed.

From such observations, Signor Frémy concludes that malt possesses a double therapeutic virtue: the one, laxative, demulcent; the other, tonic, restorative, analeptic. In fact, according to experiments by Bidault, if powdered malt be macerated for an hour in water at 75 cent., a liquid is obtained charged with syrup of starch (glucose), and what is more extraordinary is, that in this liquid is found free gluten. To this syrup of starch the decoction of malt owes its laxative power, and in that it would differ little or nothing from Hippocratic tisane [Hippocrass is a kind of a spiced wine formerly much in use in England and other countries—*Translator*]; but the gluten, which is free in it, and in a state which offers the greatest facility to being absorbed by the digestive organs, the diastase, and the bitter principle of the lupuline, give an analeptic virtue to the malt, and make an anti-dyspeptic of it. These united virtues render malt a valuable medicine, one of great utility in numerous cases, and which ought not to be surrendered entirely to vulgar medicine.—Translated by M. Donovan, for *Dublin Med. Press*, from *Lo Sperimentale*, Fas. vii.

5. *Cirrhosis in a Child.*—Dr. Wilks exhibited before the Obstetrical Society of London a specimen of extreme form of cirrhosis which came from a boy eleven years old. He had been ailing for two years and a half, and died at last of peritonitis. Mr. Roper, of Shoreditch, who attended him, made a post-mortem examination, and found the liver covered with a number of nodules like tumors. These on examination were found to be formed in the usual manner by contraction of the hepatic lobules whilst the dense structure between consisted, not only of atrophic tissue, but of a quantity of adventitious fibrous product. The interest of the case lies in the age of the patient, and in the cause of the disease. In the adult by far the most usual cause for cirrhosis is the use of alcohol, and thus the case of a child with this disease must be regarded with unusual interest; for if the patient have lived after the manner of childhood, it is quite evident that causes other than intemperance may produce the disease; whilst, on the other hand, if in these exceptional cases it should be found that the child had lived exceptionally, it would go far to establish a rule in favor of alcohol being all but a universal cause. In the present case, unfortunately, the facts were not sufficient to form a conclusion. The lad came from the lowest grades of society, and had been accustomed to take occasionally a little gin-and-water with his father.

Mr. Wm. Adams was inclined to doubt spirit-drinking as a cause of marked cirrhosis.—*London Lancet.*

6. *Powerful Oxidizing Mixture.* — Bœttger calls attention to a remarkable property possessed by a mixture of oil of vitriol and permanganate of potash, which furnishes one of the most powerful oxidizing agents hitherto discovered. Ether, alcohol, essential oils, and other inflammable substances are fired by simple contact; sulphur is oxidized to sulphuric acid with a rustling noise. The mixture is prepared with two parts of the permanganate and three parts of the oil of vitriol. If a small portion be placed in a flask, the contained air is constantly ozonized. — *Pharmaceutical Journal.*

7. *Creasote in Piles.* — Rev. Mr. B—— applied to me about the first of June, and informed me that he had been troubled with piles for nine years, and was so troubled at times that he could not ride on horseback. He had three tumors in the rectum, the furthest one being about one and a half inches from the internal anus. Notwithstanding the liability of internal piles to bleed, they never had troubled him with hæmorrhage. I ordered that the bowels should be kept open with aperients, and the rectum washed once a day with *aqua pura* and *sapo cast.; then apply* an ointment to the tumors composed

of creasote and lard, equal parts. This treatment was followed for about three months, when the patient informed me that the tumors were all gone except the one highest up in the rectum, and that was hanging by a string, and moving up and down according to the posture he assumed. I severed the cord-like substance that retained the tumor, and it was removed. The old gentleman has attended to his business as an itinerant minister without any inconvenience since the cure was completed; and I may add that the only trouble during the treatment was in applying the remedy.— *Chicago Medical Journal.*

8. *Administration of Cod-liver Oil and Iron.*— M. Janota describes a method of administering iron in combination with cod-liver oil. The iron is combined with the oleic acid of the oil. Seven drachms of carbonate of soda are dissolved in eight ounces of distilled water; the solution is filtered, and to it is added a solution of seven drachms and a half of sulphate of iron in eight ounces of distilled water. The precipitated carbonate of iron is washed, and to it is added four times its weight of oleic acid; and the mixture is heated to gentle boiling. When a large portion of the water is evaporated, and the mass has acquired a black color, with evolution of carbonic acid, the oleate of iron thus formed is shaken in a bottle with sixteen ounces of cod-liver oil, set aside for a short time in order that all the water may be separated, and filtered through white paper. The preparation has a beautiful red color, and in smell and taste differs little from ordinary cod-liver oil. It must be kept in well-stopped bottles.— *Zeitschr. für Pharm.*— *British Med. Journal, Oct.*, 1861, p. 394.

9. *Case of Embolism.*—Dr. Wilks related before the Obstetrical Society of London, the particulars of a case of gangrene of the leg and disease of the heart, which occurred in a man aged thirty-two, who died under his care in Guy's Hospital. He had been under the care of Mr. Bisshopp, of South Lambeth, for several months previously, having consulted that gentleman on March 25th for a painful, deep-seated swelling near the right elbow. This remained for three weeks, when it disappeared. On June 5th pain and swelling occurred near the left knee-joint; this prevented him walking for some time, but towards the end of the month he was tolerably well again. On July 21st he was again seized with pain in the right leg, which also became numb and weak. It was then found that the femoral and tibial arteries were impervious; the limb was cold, and ulcers appeared on it. He was then sent to the hospital, when gangrene took place in the leg. The case was considered to be one of embolism. On post-mortem examination the aortic valves were found much diseased, and covered with vegetations. The right femoral artery and profunda were filled with coagulum, in the midst of which, at the junction of these two vessels, was a portion of fibrin of a different character from the rest, and which was thought to have been carried from the heart.

Dr. Wilks thought that the condition under which the patient had been suffering for some months was due to the circulation of fibrin in the system, and thus was closely associated with the more defined attacks, which were probably owing to the deposition of larger portions of fibrin in the arteries. He believed that the two conditions differed only in degree; and that just as in pyæmia, two theories exist as to its contamination—the one, that it is spontaneous; and the other, that it is due to infection from without—so, in that condition of the arterial blood where free fibrin is supposed to be circulating, one theory supposes that the change is in the blood itself, whilst another suggests that it arises from infection in the centre of the circulation. As regards both the venous and arterial affections, although many believe that the changes are spontaneous, the reasons are stronger in favor of infection, from the surface of the body in the one case, and (though not so strong) in favor of always arising from the heart or larger arteries in the latter. As in pyæmia death may be due to constitutional disturbance from the diseased blood or to the implication of some particular organ, so in the arterial affection the symptoms and death may be due to the constitutional affection or to the local disease caused by plugging an important blood-vessel. In the cases where no particular organ is involved the capillaries may be blocked, and the constitutional symptoms are somewhat those of pyæmia—swelling of joints, &c. Dr. Wilks thought the two affections should not be separated.

Dr. Copland illustrated the subject by quoting a case bearing on it from his own experience.

Mr. H. Lee related another case.

Dr. Harley wished to know whether Dr. Wilks regarded the case of concretion in the viscera as due to embolism.

Dr. Leared, Dr. Hare, and Dr. Murchison discussed the question at some length.

Dr. Wilks replied that he brought forward the case as an example of the identity of the two affections, as they both therein existed. The obstruction of the larger vessel and the consequent gangrene, and also the fibrinous plugging of the capillaries of the viscera and the general constitutional disturbance, he thought, were but degrees of the same hing.—*London Lancet.*

MISCELLANEOUS.

10. *Soda in Coal.*—The presence of soda in coal I have not seen mentioned in any analysis of it that has come under my notice, and presume the cause of its having been overlooked is the minute quantity in it, only to be detected by operating upon much larger quantities than generally used in analysis.

My detection of it in coal was unlooked for and accidental. Having frequently observed a pale ochreous deposit upon the casting stills I was using for the distillation of coal oil, curiosity at last induced me to make an analysis of it; and I found it to be composed of alumina, silica, oxide of iron and sulphate of soda. Now under this still had been burnt a number of thousands of baskets of coke from cannel coal, from which the crude coal oil had been extracted, and which was unquestionably the source of both the soda and sulphuric acid in the sulphate of soda found in the deposit. In what state the soda existed in the original coal, or in the coke, I can not say. Whatever it was, it must have been reduced by the carbon of the coke during its combustion, to sodium, and its vapor deposited upon the bottom of the still, and being exposed to the sulphurous products of combustion, combining with them, and finally, through the agency of heat and air, was oxidized to a sulphate as found.

The presence of soda in coal is an interesting fact in several respects, particularly so to the palæontologist and geologist, as it tends to point out the habitat of the vegetation, whose remains it consists of.—E. S. WAYNE, Cincinnati, Nov. 1, 1862.—*Am. Journ. of Pharm.*

11. *Rose-colored Teeth.*—Professor Moritz Heider, of Vienna, relates that two girls (twins), who were placed under his care, had teeth of a peculiar rose-color. On the shedding of the first teeth, the permanent set also appeared of the same rose-red color, and only paled off after some years, never losing the reddish tint entirely. This appearance is difficult to account for, as no other members of the family shared the same peculiarity, nor was there any difference in the mode in which they were brought up.—*London Lancet.*

12. *Disregard by Military Commanders of Counsels of Medical Men on Sanitary Matters.*—Sir Ranald Martin, in his late work on *Tropical Climates*, makes the following statements :

"When very young, and serving in one of the most pestilential countries known in India, I made a topographic examination of the localities, and reported the result to my commanding officer, suggesting at the same time what I regarded as the most suitable arrangement for encamping the men against the coming rainy season, when it was well known that a great increase of deadly fever would result. The answer was, 'I'll be —— if I do.' Now, here was no blundering lieutenant, but, on the contrary, one of the most able and well-informed field-officers I have ever known ; yet, such was his treatment of a grave matter of duty, and the neglect of which, before the year was over, cost him his life. Again, on landing at Rangoon, during the first Burmese war, I was credibly informed that the superintending surgeon of the Bengal division there had warned the officer commanding that, without fresh animal food and vegetables, the European soldiers must perish from scurvy. The answer was characteristic, and somewhat more civil than that granted to me. It was this : 'Medical opinions are very good, sir—when they are called for.' "—*Ed. Med. Journ.*, August, 1862.

13. *Petroleum in Surgery.* — A patent has been issued in Paris for the preparation and application of new agents for stopping hæmorrhage, etc., in wounds. They consist of salts made from mineral and essential oils soluble in caustic potash or soda. They are prepared by taking coal oil, or petroleum, and stirring it cold in about one-third of its weight of caustic soda. It is then allowed to settle for twelve hours, when it separates into two different layers, the lower one being called phenate of soda. The phenate of soda is run off by a

tap in the bottom of the vessel in which it is formed. Phenates thus obtained, are applied to wounds to stop hæmorrhage, as follows: If the wound has been produced by a cutting instrument, several folds of a surgeon's compress are dipped into the liquid and applied to the wound. "It neither causes pain nor irritation," says the inventor. The compress is pressed upon the wound, and the phenates freely applied on the outside with a rag. A second compress is then applied, and sometimes four are required, but seldom more. The phenate coagulates the albumen of the blood, and stops its further issue. If the hæmorrhage is caused by a bayonet or bullet, the phenate solution is injected two or three times into the wound, then the opening is stopped with lint soaked in the solution. The superiority of these phenates for wounds is stated to be due, not only to the property which they possess of coagulating the blood, but also of their rendering the edges of the wound insensible, and causing the injured tissues to contract by acting upon them in a similar manner to tannic acid.—*Am. Gas Light Journal.*

14. *Social Meeting of the Medical Class at the Revere House.*—We find the following pleasant notice of a recent social reunion given by the Faculty of the Boston Medical School:

"An entertainment, the second of the season, was given on Friday evening last by the Medical Faculty, at which the students and many of the physicians of the city were present. We could but think, as we saw the long suite of rooms filled with the numerous guests, how great a change has taken place in the Medical Department of the University within a short time. Even half a dozen years ago the private parlors of the professors were found quite large enough to accommodate the classes which then assembled here for the lecture season. A very pleasant feature of the occasion was the presence of several of the professors in other departments of the University, which, we hope, is the commencement of a more intimate intercourse between Alma Mater herself and her offspring this side the Charles. We have barely space to allude to the high musical talent exhibited by several members of the class."—*Boston Med. and Surg. Journal.*

15. *Acclimatization of Sponges.*—M. Lamiral, whose departure for the coast of Syria with a view to obtain sponges for transplantation we mentioned in April last, has now returned, and presented a detailed report of his proceedings to the Société d'Acclimatation. M. Lamiral distinguishes three kinds of sponges for which there is a demand—the fine soft sponge called *abiand;* the fine and hard sort, called *achmar;* and lastly, the common sort, called *cabar* by the Arabs. These sponges are found in the Levant within the 36th and 33d degrees of latitude; that is, between Alexandretta and Saida. It is now universally acknowledged that sponges belong to the animal kingdom, and are an aggregate of cellules built up by gelatinous polypi similar to those which construct madreporæ, porites, and other polypifers. When the sponge is first gathered at the bottom of the sea, it is covered with a black but transparent gelatinous substance, resembling vegetable granulations, among which microscopic white

and oviform bodies may be distinguished. These are the larvæ destined to perpetuate the species. When arrived at maturity, they are washed out by the sea-water which incessantly flows through the sponge; they then swim along, by the aid of the vibrating cilia or hairs with which they are provided, until they reach a suitable rock, to which they attach themselves, and there commence a new life. This emigration of the larvæ from the parent sponge occurs about the end of June and the beginning of July. The fine quality of sponges is chiefly found at the depth of fifteen fathoms or thereabout; the common sponge lies at depths varying between twenty and thirty fathoms. At Tripoli (on the coast of Syria, not of Africa) M. Lamiral engaged some divers, who commenced operations on the 21st of May. The sponges gathered were immediately placed in boxes, through which a stream of sea-water was constantly made to flow, the animal matter being, of course, left on them, and protected from injury. These sponges arrived at Marseilles on the 17th of June; thence they were taken to Toulon and the islands of Hyéres, where stone troughs, with five sponges in each, were sunk in different places. The success of the experiment will not, of course, be known until next season.—*Phar. Jour. Lond.*, *Oct.*, 1862, *from Times*, *Sept.* 26*th.*

16. We have received from Mr. Patten, Druggist, specimens of Robbins' water-proof surgeon's adhesive plaster, which appears to possess valuable properties. It only requires moistening to adhere closely, and may be applied equally well at all seasons, and upon wet surfaces and wounds which require frequent washing. It is evenly spread upon sheets ten inches wide and a yard in length, and is put up in tin boxes. It is also spread on silk one half the above width. —*Boston Med. and Surg. Journal.*

OBSTETRICAL.

17. *Premature Delivery, with very rare Presentation of the Fœtus.*—Dr. W. T. Owen, of Louisville, Ky., was called to see Mrs. J., of Louisville, aged 15 years, primipara, in labor after a seven and a half months' pregnancy, on the 24th of May, at 2 o'clock A. M., and found her with strong, frequently recurring labor-pains, induced by a large dose of castor-oil, which she stated that she had taken on the previous evening. Os uteri slightly open. Prescribed sulph. morphiæ, gr. ss., every half hour, or *pro re nata.* Two doses secured perfect tranquility through the remainder of the night, and for the next twenty-four hours, when he was called again, to find her decidedly in labor, and the os uteri dilated to the size of a half sovereign or over; the lips of the os rigid, membranes tense, uniform to the sense of touch. Unable to distinguish the presentation. Maintained the integrity of the membranes until the anterior lip of the neck of the uterus would easily pass up behind the os pubis and remain, and supposed the nates to be the presenting part; then ruptured the membranes, and a most inordinate flow of liquor amnii passed off instantly. Upon immediate examination, he found the right side of the fœtus presenting; the

anterior surface of the child corresponding to the anterior aspect of the mother; the right hip of the child in the left iliac region, the right shoulder in the right iliac space, equidistant from the os uteri proper. The next pain was very severe, forcing the child down deep into the pelvis, with no prospect of delivery in said position. He demanded a consultation with Prof. Miller. However, he placed her immediately under the influence of chloroform carried to anæsthesia, and the uterus, which hitherto had strongly contracted, and was now moulded to the shape of its contents, relaxed, and enabled him to push up the superior extremity sufficiently to bring down by its next pain the nates; and with the second pain the breech fairly engaged within the os, with a foot and leg flexed on the thigh. He delivered her very shortly after of a living male child. The head was sufficiently long in its detention to cut off the placental circulation, which he counterbalanced in his efforts at extraction—his finger in the child's mouth enabling it to take four inspirations; intra-uterine respiration.

Having given a concise account of the prominent features of the case, he desired to make a few observations by way of synopsis.

1st. The extreme youth of his patient—scarce fifteen years; the vaginal canal, os externum smaller than any accouchée he had ever known. 2d. The propriety of permitting the membranes to remain entire, if possible, until full dilatation of the os takes place. This he deems of the first importance in vertex presentations, and *à fortiori* in nates and other preternatural presentations. 3d. The value of chloroform—in this case most signal. Why? It produced relaxation of the uterus sufficient to enable him to convert a most unusual and dangerous position into a comparatively safe and not unusual one. At the time of the rupture of the membranes, when the fact was clearly before him that he had a side presentation, and he demanded a consultation, his mind was clearly made up that version was unattainable on account of the extreme smallness of the vaginal canal and os externum—that his only chance was embryotomy, and its feasibility for the same cause was a question. He succeeded without other aid. 4th. The inspiration of four full breaths, taken by the child while its face was impacted in the hollow of the sacrum; intra-uterine respiration. 5th. A living child, well-formed, uninjured.—*Amer. Journ. of Med. Sciences.*

18. *A Girl aged Ten Years, Eight Months and Seven Days, delivered of a Healthy Child at the full time of Pregnancy.*—Dr. Josiah Curtis, of this city, in his Annual Report to the Legislature, of the Marriages, Births and Deaths in the State for the year 1858, alluded to this very remarkable case, and being much interested in it, he has since that time collected the most satisfactory evidence of the facts. For the last year or more, Dr. C. has been at the South with the Army, and at the last meeting of the Society, portions of letters were read that were sent by him:—1st, from Mr. Allen Presbry, one of the Overseers of the Poor in the town of Taunton, in this State; 2dly, from Dr. Alfred Baylies, of Taunton; and 3dly, from Mr. David Bassett, Superintendent of Almshouse at Taunton.

Mr. P. says (Nov. 15, 1858):—"Elizabeth Drayton was born at the Almshouse in this town, May 24th, 1847; so says the record in the old Family Bible belonging to that establishment, and so also says Dr. Alfred Baylies, who was with the mother when Elizabeth was born. His book also corresponds with the time and circumstance. Dr. Baylies was also with Elizabeth on the first day of February last, when this male child was born, a nice, full-grown, plump baby, weighing eight pounds, good weight. These are facts, against which there does not exist the shadow of a doubt.

"The reputed father of this child is a lad said to be about 15 years old, and belongs in the State of Maine. There are some circumstances in this case which go to prove that this precocious girl was pregnant twenty-four days before she was 10 years old. On the first day of May, 1857, they were detected in their illicit pleasures by his aunt, who lives in Norton, with whom she had lived two years or more, and to whose house he had come to make a visit of two or three weeks. Immediately after they were caught together, he was sent home forthwith to his father, who resides in Bangor, Me. The child was born the first day of February, 1858, leaving a space of just nine months. He is a fine little fellow, of a very handsome model, hair curls a little, has a bright blue eye, and to all human appearance he has the essential elements in him to make a great man. His growth thus far corresponds with his age. The mother is a fleshy, healthy girl, and rather larger than girls of her age."

Dr. Curtis has examined a number of works, and has found no record of a case that was parallel to the one above related. The following references were sent by him.

Dr. Tanner says (Signs and Diseases of Pregnancy, p. 9, London, 1860):—"The earliest age at which pregnancy is positively known to have occurred in this country, is eleven years. When in labor, the girl was seized with convulsions, but was delivered of a full-grown, still-born child, without unusual difficulty, and she recovered favorably." Delivery occurred when "she was only a few months advanced in her twelfth year. Her figure was that of a full-grown young woman. Mammæ were fully developed, and it was proved that she had menstruated before she became pregnant."

Dr. Montgomery says (Cyclop. of Practical Medicine, Article Signs of Pregnancy):—"Conception before the age of 14 is very rare, but it appears that instances of it have occurred. Bruce mentions that in Abyssinia he has frequently seen mothers of eleven years of age, and Dunlop witnessed the same in Bengal. La Motte delivered a girl who had not completed her thirteenth year. Instances of conception at 9 and 10 years of age are recorded by Jubert and others, but they scarcely appear deserving of credit; yet we find Dr. Good expressing his assent to such relations, and quoting Haller and Professor Schmidt in support of them. The earliest instance of pregnancy known to the writer was that of a young lady, who brought forth twins before she had completed her 15th year. Sir E. Home knew two instances, in one of which a girl of 13, and in the other a girl of 12, gave birth to children."—*Boston Med. and Surg. Journal.*

THE

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E. B. STEVENS, M.D., AND J. A. MURPHY, M.D.

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ARTICLE I.

Bloodletting and its Substitutes.

NUMBER I.

BY T. L. WRIGHT, M.D., BELLEFONTAINE, OHIO.

A great question of medical discussion at present is bloodletting. We have presented to us substitutes for it; on one hand depressing agents, and especially veratrum, are proposed; while, on the other, we are offered tonics and stimulants, particularly quinine.

I wish to enter my protest against the employment of either class of remedies spoken of, as a substitute for bloodletting. I deny that there is, or can be in the nature of things, a substitute for the abstraction of blood. Some of the sensible effects of bloodletting, sensible to the *friends* of the patient, may be obtained by the institution of various modes of treatment; but never all of them. But, as to the actual condition of the patient himself, very few, if any, of the prominent and essential therapeutical effects of bloodletting can ever be obtained by any measure whatever other than the actual abstraction of blood. I wish to speak plainly. Of all the propositions to abandon bloodletting, or even to modify its employment, I regard that which proposes the employment of veratrum as a substitute, the most injurious, unscientific and unsatisfactory. I have never seen the man who could give a satisfactory account of the *modus operandi* of veratrum in the treatment of acute inflammation. There is no pretense that it diminishes the volume of blood circulating in the vessels; there is no pretense that it has any of the properties of the salines, or of mercury, in destroying the inflammatory constituents of the blood.

Its chief effect is to retard the rapidity and strength of the circulation, thus favoring local congestions, preventing the resolution and dissipation of congestions already present, and promoting the inception and progress of the lower and more destructive inflammatory processes.

It is claimed that the peculiar effect of veratrum upon the pulse absolutely destroys an essential element of inflammation—namely, fever. Now is the inflammation or the fever the consequence ? Undoubtedly the inflammation proceeds in advance, and the fever comes afterwards. First, a little inflammation; then, a little fever. The inflammation intensifies, (either fully or in some of its essential elements,) and the fever increases in proportion. It would then be wise to reduce the inflammation to cure the fever, and not quiet the fever with any expectation of curing the inflammation. It is absurd to reduce the fever by destroying or subduing those nervous energies necessary to react upon the inflammation, with a view of thus subduing the inflammation.

The whole doctrine of inflammation and fever, as explained by those who advocate the use of veratrum, is new, and is as false and fallacious as the effect of veratrum itself. Disease has its laws, as well as health. When an inflammation is set up, fever follows, not as a mere symptom or sign, much less as a disagreeable complication, which it is desirable to suppress at all hazards. *The fever is a concomitant, physiological, compensative action, set up by the conservative powers of the system, as antagonistic to the depressing tendency of the local affections.* It is in its abstract character healthful, and calculated to sustain the system for the time being, and to aid in conducting the inflammation itself to a satisfactory and speedy issue. Any inflammation without fever is dangerous, as tending to mortification. The system will sink. The patient will die of syncope. Fever, within certain proper and well-known bounds, is one of the essential elements of cure in inflammatory affections. Where it is deficient, the patient is in great danger, and should be sustained by an artificial fever, raised by stimulants. The chief virtue of stimulants is to raise this essential artificial fever, when the conservative powers of the constitution are inadequate to the production of spontaneous fever.

Fever is useful also as a test by which to judge of the violence and kind of inflammation, and determine the various steps in the progress of the cure. By attacking the inflammatory process directly, with bloodletting, salines, calomel, opium, etc., we act secondarily upon the fever. The system becoming relieved of the danger as the inflammation becomes subdued, relaxes its morbid anxiety as to the imminence of immediate dissolution. The fever, in other words, abates as the disease disappears. On the other hand, if the inflammatory process progresses badly and becomes more intense, or if it threatens to terminate in the death of the part, the pulse—the variety of the fever—will not only indicate the state of the disease, but it will indicate its tendency also.

It is a misfortune that veratrum has ever been introduced into the practice of medicine. The mortality of pneumonia has been terribly increased by its employment. Bloodletting, digitalis and antimony more than supply its place. It is an enormous humbug; it is "hope deferred;" it is a treacherous impostor, "holding the word of promise to the ear, and breaking it to the hope." I never see one of the "friends" nursing a patient who is taking veratrum, consult his watch with the gravity of an owl, to see if the pulse is "higher than sixty-five or seventy," without thinking of the fellow who, going a *sniping* for the first time, *holds the bag.* The pulse will stay down, so far as any cure is effected by *veratrum,* about the time the snipes come along.

I propose to pursue the discussion of the subject of "bloodletting and its substitutes," in its various aspects, in future numbers of the *Lancet.*

ART. II.

Camp Fever, alias Scorbutic Fever.

BY ALEX. MCBRIDE, M.D.

I do not propose in this article to give the entire pathology and therapy of camp fever; to do so would require more experience and ability than I have attained to. But as the subject is chiefly important in army practice, and as I have not yet seen any treatise upon it giving its peculiarities, I think those having had experience with it should promulgate what they know about it, so that such knowledge may be useful while the war lasts, for it is a disease which we will see but little of in civil practice.

Camp Fever.—By this designation I mean a febrile disease which is met with in those persons who have for some weeks or months lived upon the diet and been exposed to the vicissitudes of army life; a fever which in some respects resembles the typhoid fever of Louis, Zenner, Watson and others, the ENTERIC fever of Wood; and which has been so well described by these authors. Tenderness of the abdomen, with tympanitis, and a dry brown tongue, with febrile reaction, and a peculiar diarrhœa, are the group of symptoms, which with the rose-colored spots are diagnostic of enteric or typhoid fever.

Camp fever is frequently ushered in with slight chills frequently repeated for several days, the pulse, generally at least, accelerated from the first. The diarrhœa is full as constant an attendant as in typhoid fever, but tympanitis is neither constant nor frequent. Abdominal tenderness is not so constant as in enteric fever. The tongue is more often large and broad than otherwise, and *always fissured from the first.* The fissures are both *transverse* and *longitudinal* generally, and when the tongue is moist, as it is sometimes, or when it is artificially moistened, the margins of the fissures or cracks have a macerated look as if penciled with milk and water. This is a very common and peculiar appearance in the advanced stage of the disease. *The fissures are plainly to be seen throughout the whole course of the disease.* It is the first sign of the disease and the last one; it is seen before the patient gives up that he is sick, and it is still to be seen when he is convalescent. These fissures are frequently to be seen in out-door patients who never take to bed with the disease. The cracks of the tongue in enteric fever seem to be dependent on dryness, and are little or not at all perceptible when the tongue is not dry, and disappear entirely as the disease declines.

I have said the fever is frequently ushered in by repeated slight chills. I think this is generally so, but it is difficult to say always how it does begin; for many, if not most, cases have fever tolerably well established when we first see them, especially in the hospitals: but, after having seen the sick soldier in nearly every imaginable condition of camp and field service, I am of the opinion that the inception of what may with propriety be called camp fever is attended with chills. The attending headache is similar to that of enteric fever, but less violent. The urine is diminished in quantity and heightened in density and color, and when the diminution is great there is delirium. This is a circumstance worthy of note. The delirium then would seem to arise from uræmic poisoning, and not from inflammation of intestinal glands, of which there appears to be little or no evidence. The patient generally has appetite for food through the whole course of the fever, and especially for vegetable and acidifying food and for sour drinks; he not only has appetite, but the food is well borne when prudently prepared and administered. An old physician of much experience in treating fever said, soon after commencing duties in a military hospital, "I never saw men with fever eat so. They eat more like wood-choppers than like sick men." For this reason the semi-liquid stools are copious, and contain the detritus of food as in common diarrhœa.

Now in enteric fever the patient frequently has some relish for certain kinds of food from the first, and I believe generally after the first week, but his appetite for it is not strong, neither can he bear much quantity. The kinds best relished and best borne, according to my experience, are *liquid forms of azotized food,* the opposite of that relished and borne in camp fever. But these relishings are probably variable in enteric fever, according to the previous habits or diet of the patient.

In camp fever proper we do not find the rose-colored spots as in the enteric, but toward the fatal termination we frequently see petechiæ or what is more like ecchymosis or purpura, and this to a large extent on the trunk and extremities. Alvine evacuations: these are fæcal, more or less mixed with detritus of undigested food; semi-liquid; color not peculiar; odor not peculiar, and this is the case through the whole course of the disease. The quantity is considerable, evidently in consequence of the amount of food taken. This is in striking contrast with the fætid pea-soupy character of the stools of enteric fever, to say nothing of the purulent and briny quality in the ulcerative stage of that disease. The pulse differs in no peculiar respect from that of enteric fever, though I am of the opinion that it is more uniformly soft and somewhat more full. Latent pneumonia and congestion of the lungs recur probably with nearly the same frequency as in enteric fever. Boils, bed-sores and cold abscesses also occur. The hair falls out with nearly the same constancy. The termination of this fever in restoration or death depends very much upon the opportunity that may be enjoyed for proper regimen. The febrile type is atonic or typhoid from the beginning, the disease assuming in the advanced stage a very depraved aspect; the patient becoming much emaciated with involuntary evacuations; but although there is a partial stupor, unconsciousness is not complete, the stupidity or inanity resulting not from direct disease or derangement of the nervous centres, but from *lack of animation.*

I am aware that some other febrile disorders occurring in the army are frequently called camp fever. There occurs in the army as much variety of febrile disease as in civil practice, and these occur from the same causes. We meet with every form of inflammatory fever: intermittent, remittent and bilious fever, also typhoid, and, for aught I know, typhus. I have seen a few cases that resembled typhus more nearly than *anything else. They* were not enteric, neither did they present the scorbutic character, but were continued fevers of decidedly typhus type. Then we meet with a fever which in the beginning resembles typhoid, except that there is neither tympanitis nor diarrhœa. This fever of continued type will run through a course of two to four weeks without any decided characteristic symptoms, with perhaps an eruption of sudamina, which seem to indicate nothing but abundant warmth and moisture. Similar anomalous fevers are met with in civil practice, and excite no great curiosity.

While among the mountains of Eastern Kentucky, the men were frequently attacked with what we got in the habit of calling mountain ague. It consisted of a seizure, at no very regular intervals, of chills, followed by headache and slight fever without any sweat. Whether this kind of attack was peculiar to that region or whether it is peculiar to an army on a march in a mountainous country, I have not learned. I suppose it was a proper ague. All these fevers are liable to a greater variety of complications than the same diseases met with in civil practice. There is nothing in these fevers or febrile diseases that stamps them as peculiar to the army or camp,—therefore, they should not be embraced within the name of camp fever. There is no doubt in my mind that the elements of camp fever may combine with the elements of enteric fever and perhaps with other fevers and other diseases, thus producing an extensive variety of effect. It is not in accordance with the plan of this article to offer speculations upon the varieties, especially as I am not positive of their existence.

It would be too much to claim or expect that I should be correct in all the foregoing statements and suggestions with regard to a subject new to the profession at large, and upon which the most favored have but a poor opportunity to carry out full and complete observations. The most that I expect to accomplish is to set forth distinctly an imperfect model of a disease *sui generis*, and hitherto not well distinguished from other continued fevers.

Now to give in a clear light the diagnostic differences between camp fever and typhoid or enteric fever, I present the following tabular arrangements of those signs and symptoms which are peculiar to each, some of which are available for diagnosis early in the respective diseases.

DIFFERENTIAL SIGNS AND SYMPTOMS.

CAMP FEVER.	ENTERIC OR TYPHOID FEVER.
Abdomen soft, with little or no tenderness.	Abdomen tympanitic, with tenderness more or less intense.
Tongue generally large; frequently flabby and pale.	Tongue generally small, and red where not coated.

Tongue fissured always; fissures peculiar and continued through the entire course of disease; not dependent on dryness.	Tongue cracked when dry, but fissures not persistent; disappearing when the tongue becomes moist.
Appetite generally good, and solid food well borne in considerable quantity, but digestion imperfect.	Appetite slight, and food not borne except in small quantity of liquid form; digestion perfect when too much not taken.
No characteristic eruption during any stage of the disease.	Characteristic rose-colored eruption, usually in second or third week.
Delirium caused apparently by uræmic poisoning.	Delirium caused apparently by enteric inflammation and the general action of fever on sensorial system.
Alvine evacuations large and not characteristic.	Evacuations small and characteristic.

Pathology and Cause.—I shall venture nothing positive upon the pathology of camp fever, as I have had almost no opportunity for dissections, for the reasons that there has always been a lack of a proper room at those hospitals where I have had the honor to labor,—these buildings having been constructed in the hurry of military preparation; also there was generally lack of time to make proper investigation; also having regard for the moral effect upon the sick and other soldiers in hospital. These difficulties will be understood by every volunteer army surgeon.

Judging from the appearance of the evacuations, the general absence of tympanitis and tenderness, and the absence of delirium except that obviously caused by uræmic poisoning which sometimes occurs, I am of the opinion that inflammation of the intestinal glands does not belong to this disease. An excited or irritated condition of the mucous membrane of the alimentary canal, caused by the constant passage, in large quantities, of undigested food, and also by the influx of humors and congestion, caused by long continued exposure to cold and damp, is in my opinion the chief pathological condition which, with the scorbutic diathesis, causes this fever. Imperfect digestion and consequent imperfect absorption and assimilation, cause depravity of the fluids and solids of the body. Then, to state the case in brief, the causes of the fever are: Large quantities of azotized food, imperfectly prepared, privation of antiscorbutic food, long continued exposure to low temperature and damp air, the widest possible range of mental and moral excitement and depression. These are the causes which, combined and continued from a few weeks to a few months, produce the peculiar fever. As might be supposed, *à fortiori*, the fever is of vastly more frequent occurrence in new recruits than in old soldiers.

Chemistry does not clearly show us the chemical office of certain kinds of foods—the alkalies, the vegetable acids and the acidifying fruits and vegetables ; but experience proves their necessity, hence we may call them catalities. They are necessary to digestion and assimilation, and camp fever arising when these kinds of food are deficient, and never when abundant, hence I conclude that the remote cause of camp fever is lack of catalitic food, with for its development the ordinary causes of diarrhœa superadded. I shall offer no further speculations upon the causes and nature of this disease, but will suggest that, in contradistinction to other fevers which occur in camp as well as elsewhere, it might with propriety be called *scorbutic fever.*

The camp diarrhœa proceeds, in very many cases, from the same combination of causes,—I mean that diarrhœa which soldiers frequently have without "coming down sick," to use a homely phrase. These cases should be regarded as allied to camp or scorbutic fever, especially those cases having fissured tongues. Cases not presenting any peculiarity of tongue I do not regard as of the same class, and they are curable by ordinary means. I can not let this opportunity pass without speaking of the peculiarity of the tongue presented by many soldiers who have been for some months in the army and undergone the seasoning. The tongue has a cicatrized or *semi-lobulated* appearance on the dorsum, precisely as if many large wounds or sulci had cicatrized. How long this appearance lasts I do not know, neither do I know whether all these cases have had camp fever partially or fully ; but from what I have seen in those cases where I knew they had suffered from that disease more or less, I conclude this appearance results from the fissuring caused by that disease.

Treatment.—Upon this part of the subject I shall be brief, and set up no claim for dictation, but present a summary of what has been my method. Control the diarrhœa from the beginning through the whole course with opiates, of which class the gum, powder and tincture are the best. The pulv. Doveri has not enough of stimulating quality for so atonic a disease. Tannic acid or ferri persulphas, or tinctura ferri chloridi are necessary and excellent remedies, combined with the opiate in cases where the evacuations are very liquid and copious. When the bowels require unloading, as will sometimes be the case, order thus: ℞. Ol. ricini, flʒ., iv. *vel* fl℥. j. ; tinct. opii, M. xx. *vel* xxx. Mix. To be taken at once.

This dose will seldom fail to procure free evacuation in a few hours, and no more active purgation will ever be necessary. Let the opium be continued as a stimulant and anodyne means in dose of about gr.

ss. every three to four hours, leaving off the astringent when not indicated. The tinct. ferri, however, may be used sometimes to advantage without reference to any astringent effect.

I have sometimes given in the onset of the disease, when there was little or no diarrhœa: ℞. Quinia sulph., Pulv. camphor, āā grains iv., and sometimes one-quarter of a grain of sulphate of morphia added to this. This dose has sometimes appeared to have a very happy effect to mitigate the disease. It appears to generalize the circulation and thereby mitigate the fever and diarrhœa; but this dose will produce no marked salutary effect after the disease is established fully.

Spirits mindereri, with the acid in excess in the dose fl℥. ss. to j., taken in conjunction or alternation with the opiate, is a most excellent remedy to promote moisture of the mouth and skin. It abates the thirst, and in my opinion facilitates the urinary secretion. I suppose almost any physician who had treated typhoid enteric fever would expect in the disease in question to effect moisture of the dry tongue by the exhibition of turpentine emulsion, but in this he would be disappointed. With this medicine the tongue will become more dry and the case will not improve, and this fact seems to mark a difference in the pathology of this from enteric fever. Wood says in his excellent treatise on enteric fever (vide *Wood's Practice of Medicine*, vol. i., p. 357): "I can not too strongly impress upon the profession my convictions of the importance of this medicine" (turpentine). "It may be employed in all cases in the advanced stages of this disease when the tongue is dry. But there is a particular condition, and that a not uncommon and sometimes very dangerous condition, in which I have very often employed it, and hitherto have seldom known it fail." Then he further goes on in clear and forcible terms to show that this "condition" is that of ulceration. This part of Wood's treatise is all important to those who would successfully treat enteric fever, and my experience has shown to me that it is important to make the distinction in treating camp fever. This fact, in default of other evidence, would seem to indicate that the pathology of the two fevers is different.

The partial suppression of urine, which is perhaps the most fatal incident of this disease, does not seem to me to be an indication for turpentine, even though the mouth is parched at the same time. In this state of the case acetate of potassa is a good remedy, and a very convenient form in the camp is: ℞. Bicarb. potass., ℈j.; common vinegar, water, āā fl℥ *ss.* *M.* Take effervescing. Repeat every three to four hours. Nitrous ether also may be given to advantage. In these cases the patient is delirious, and the prognosis should be unfavorable. In this feature of the disease, as in the disease generally, vegetable acid drinks should be freely given, of which vinegar and water is as good as any, and very grateful to the patient.

Mercury as a remedy in this disease requires no further mention than that of condemnation. It has no place in the treatment.

Epispastics should be used to fulfil indications as in other diseases. In the congestion and inflammation of the lungs, which sometimes complicate this disease, *blistering ought not to be omitted*, and it should be repeated as often as indicated. Blistering for the delirium of uræmic poison is of doubtful efficacy. If applied at all, I think it should be on the lower parts of the trunk or to the thighs, with the view of re-establishing the renal secretion.

I shall add nothing further on the medical treatment of this disease. Its various complications and phases are to be managed on rational principles, keeping the peculiarity of the disease in view. Regimen is everything in this disease; I mean that proper regimen is paramount to everything else. Cleanliness, quiet and proper warmth, with free ventilation, demand the physician's first care. The food should consist of well prepared common food, with a considerable preponderance of the antiscorbutic vegetables. I have seen patients who were quite low with this disease, eat boiled potatoes and carefully and finely cut cold slaw. They ate such food with a relish and to advantage. Cabbage soup, potato soup, boiled turnip with butter, milk sweet or sour, according to taste, etc., etc.; and the patient's appetite, which is generally pretty good, should be indulged to a considerable extent. Acid drinks are important, and ought not to be neglected. Hard cider and native wine properly diluted are perhaps the best, but in field practice these can seldom be had in sufficient quantity; but fortunately the commissariat generally supplies abundance of vinegar, and I am of the opinion, after considerable experience in its use, that it is as good, if not better than any other vegetable acid. Let it be drank freely by all the patients who relish it, and this will be nearly all, diluted with eight to ten parts of water to one of vinegar; and this can be varied by sometimes adding a little sugar, and sometimes to this again a little whisky. Citric and tartaric acids can also be used for variety, and when these are scarce, cream of tartar can be substituted. The jellies and sour fruits now so much in vogue, and so munificently furnished by the various sanitary societies, are valuable in the nourishing of these patients.

I am very much of the opinion that a regimen similar to the above diligently and carefully pursued from the onset, would alone be sufficient for the recovery of most cases of scorbutic or camp fever.

If in the foregoing rude attempt to briefly portray camp fever as my experience has impressed it upon my mind, I have shed some light, and will aid thereby in calling out other facts upon the subject, the reader's time will not have been lost nor will my labor have been in vain.

ARTICLE III.

Reports of Cases.

BY W. H. LAMME, M.D., CENTREVILLE, OHIO.

Editors Lancet and Observer :—Three deaths recently occurred in one family, that of Mr. Frank. Brewster, near Bellbrook, Ohio, under circumstances calculated to attract attention. It appears that some time during the month of January of the present year, a son of Mr. B., æt. about 22, was taken with a chill, attended subsequently by a fever of considerable severity. Soon after this a redness appeared on different parts of the body, which was diffused, and was marked more particularly upon his thighs. Some of his attendants say he also had in the beginning a sore throat. The disease at this time was pronounced acute rheumatism by his physician. In a brief period of time he was seized with some internal difficulty, from which he rapidly sunk. The nature of this latter difficulty I was unable, from the meagre accounts gathered from the friends, to make out. He was affected with some hepatic derangement, doubtless; as it was said the skin and eyes were of a deep yellow previous to death. He lived but a few days from the accession of the disease.

The wife, a lady perhaps over 65 years, was taken sick in a short period after this, with a chill and sore throat, headache, pains in the back, joints, etc., with fever. A redness and swelling of the skin also soon made its appearance on different parts of the body. The parts affected became puffy and exceedingly painful. The skin over these places soon became livid, especially on the arms and about the ankles, with livid vesications, and finally sloughing, with a thin serous discharge of purulent matter. On other parts affected the swelling became flaccid and *quaggy* to the feel. Such was the imperfect history obtained from the attendants. The course of treatment pursued I did not learn ; the *physician being of the* "Progressive School," I was spared a consultation in the case. She sank rapidly, and died the day following my first visit. The right arm from the elbow to the extremities of the fingers was gangrenous, and in other places extensive sloughs had taken place.

A daughter, a young woman, was also suffering with sore throat. She was taken in the latter part of January, a few days previous, followed by fever and general debility. This was on the 1st of February. The mucous membrane of the fauces exhibits a red, glassy and dry aspect ; this is accompanied with the most excruciating pain and difficulty in deglutition. There is also a small red spot on the under surface of the right elbow. This subsequently spread to the size of a common-sized tea saucer, and was very painful to the touch. Nitrate of silver in solution was freely applied to this, and it did not extend. Internally she took sulph. quinia, grs. iij. every third hour, with muriated tinct. of iron, and opiates to relieve pain and procure sleep, as she had not slept for four nights in succession. The silver in solution was also freely applied to the throat by means of a sponge probang, and the iron diluted with water as a gargle, with rubefacients and warm fomentations externally. The disease throughout was obviously of an *asthenic* character : pulse soft and frequent, with marked general debility, being the characteristic symptoms. The general treatment as above indicated was continued, and the patient gradually recovered, so as to be able at the present writing (Feb. 19th) to sit up.

Another son of Mr. B., who lived at Sidney, Ohio, married, was at home on a visit, with his wife, during the time of the sickness in the family ; was taken on the 4th of February with shivering, soreness of the throat, headache, with the general symptoms denoting fever. The pulse was increased in frequency, but not in force ; patient complained of great languor. The pain and difficulty of swallowing was not so urgent in this case as in the preceding. The fauces showed considerable redness, but not so much dryness. Prescribed cathartic medicine the first day, with a gargle of the acetate of lead in solution, and rubefacients and hop poultice externally. The day following the throat seemed to be much better ; experienced but little difficulty in swallowing. The bowels were acted upon, and he seemed to suffer less with headache. The pulse was, however, increased in frequency, the skin was hot and dry. No appearance of inflammation externally. The patient seemed dejected, and felt, as he said, "indescribably bad somewhere," but could not refer it to any particular part. He was put upon sulph. quinia, grs. iij. every three hours ; spirts nit. dulcis, ʒ ss. every three hours ; also with opiates sufficient to allay pain and irritability. I ought to mention that he for the first time complained of nausea, and vomited once, but which he then attributed to some fruit in which he had taken his medicine. The next day found the patient complaining of increased nausea, with occasional vomiting; skin relaxed, pulse frequent and full, tenderness over the epigastrium, great depression, countenance betraying anxiety, skin slighty yellow, urine high colored and scanty. Prescribed mercurials in small doses, with quinia, sulph. morphia and wine internally, with counter-irritation to the epigastric region, hot fomentations, etc.

That night a messenger came with a request to visit the patient immediately, as he appeared to be fast sinking. Not being well myself, I accordingly sent Dr. McCracken, of this place. He found the patient suffering with the most excruciating pains in the stomach and bowels, constant retching, extremities cold. When I saw the patient on the following morning, he was evidently moribund. The extremities were cold, the body covered with a cold, clammy sweat, constant retching, occasionally ejecting a black bilious-looking matter. The whole surface of the abdomen was sensitive to the touch, but not tympanitic; the skin and eyes of a deep yellow tinge. The skin over the arms and legs were now covered with a diffused dusky redness, presenting the appearance of an extensive burn. The body also in many places presented the same spots of inflammation. Efforts now were made to alleviate the patient's sufferings by large doses of sulphate of morphia internally, cups and hot applications externally; but all was of no avail. He sank rapidly, and died on the fourth day from the attack, in the full possession of all the faculties of the mind.

Several members of this family beside those mentioned suffered with sore throat and slight indisposition, but all recovered in a few days. A young lady, a relative, was taken sick in the family with the same symptoms, but was removed, and I learn was sick for several weeks. The wife of the young man who died last was taken with a chill and sore throat, but went to her home in Sidney immediately after these symptoms set in, and recovered, I believe, rapidly.

The inquiry now is, Was this epidemic erysipelas, or the result of infection?

A son-in-law of Mr. Brewster returned from the Army of the Cumberland, where I believe the erysipelas is now prevailing. What the nature of his disease was I could not certainly ascertain, more than that he had a "sore on his side," which was deep and discharged very offensive matter. Mr. B. waited on him, and the young man, the first victim, slept in the *same room.*

Could it have been hospital gangrene, or malignant pustule? Would such be the result from either as described in the foregoing cases? Such is at least not common: persons infected with either of the above are usually affected with a similar disease.

ARTICLE IV.

Case of Quinsy;

WITH SUPPURATION, OPENING OF AN ARTERY, HÆMORRHAGE, AND DEATH.

BY J. C. REEVE, M.D., DAYTON, OHIO,

I was called to see this patient on Friday, the 20th of March last, and reached him about 9 P. M. I found a young man of good general health and constitution, and of temperate habits, aged about 23 years. Two weeks before he had been attacked with inflammation of the left tonsil; on or about the preceding Saturday an abscess had burst internally, and on that day hæmorrhage took place, and this had recurred some six or eight times since. The exact amount of loss could not be ascertained; "pints" and "quarts" figured largely, as usual, in the accounts of friends. This, however, was certain: it had gushed out profusely from mouth and nose, and he had fainted away every time it had occurred. His appearance showed plainly that the loss had been great; he was blanched, extremely weak, the pulse with the sharpness and quickness incident to cases of hæmorrhage, but of fair strength. I examined the throat as well as possible in a patient very loath to submit to any procedure whatever; he could not, or would not, open his mouth very wide. I saw, however, the left tonsil enlarged, blocking up about one-third of the passage,—saw several dimple-like depressions in it; no appearance of sloughing, nor opening like that of an abscess. There was some swelling externally below and behind the angle of the jaw, and the meatus of the ear was filled with what appeared to be a clot of blood, and there had been a discharge of bloody serum from this passage.

The treatment had consisted in the application of tannin and of a strong solution of nitrate of silver, by means of a probang, with muriated tincture of iron internally.

No bleeding point had ever been seen by the physician in attendance; the flow was profuse and syncope came on so soon, that there was only time to apply the solution and the bleeding was stopped. My conclusion from these facts was, that the application had very little, if anything at all, to do with checking the hæmorrhage; that the source of it was probably behind and below the tonsil, too distant to be reached by probang in the condition of the parts; and that it stopped from syncope and the process of natural hæmostatics, rather than from the measures of art.

The course to pursue was plain: ligature of the carotid artery alone offered the patient safety, and this I advised, and advised it without delay. My advise was not accepted. The last bleeding had occurred at 11 o'clock of the previous night; so long a time as twenty-two hours had not before elapsed without a recurrence; this encouraged him; it was evident, too, that he placed great reliance on the application of nitrate of silver—"it had stopped it every time;" and added to this, he was exceedingly fearful of being hurt, and the females of the family set themselves firmly against any operative procedure. I was obliged to content myself with leaving at hand some of Monsell's solution of the persulphate of iron ready to apply, and in obedience to the wishes of others made an application of it then to the tonsil.

I saw him again in the morning. He had passed a good night, and felt encouraged that no further bleeding had occurred. I called the attention of his physician to his pulse, which was of course stronger; and his opinion was that it had never heretofore gained so much strength without the hæmorrhage reappearing. I again explained to the patient the frail tenure by which he held his life, and urged the operation,—but in vain. I then recommended veratrum viride to keep the circulation down, and the application of the solution of iron should the bleeding break out afresh, and took my leave. I was just about leaving the village, had not been absent from the house fifteen minutes, when a messenger came running to say that he was bleeding again. I was but a few minutes in reaching the house, but he had already fainted! I found him propped up in bed, his feet over the side, blood over the bed and clothing, and pouring from his mouth and nose! I made pressure over the carotid artery, placed his head low, held up one of his arms and one of his legs, and got the doctor to make an application of the solution. It was all useless, however; for a few minutes his life seemed trembling in the balance, and once I thought he was rallying,—but a brief period only was necessary to show that he was indeed dead.

Several cases similar to this are given in *Watson's Lectures*, but the rarity of their occurrence renders each one worthy of record; while few instances can ever be met with where life could be more certainly preserved by the interference of our art.

ARTICLE V.

Progressive Muscular Paralysis of the Tongue, Soft Palate, Cheeks and Lips.

MESSRS. EDITORS LANCET AND OBSERVER :—The Paris correspondent of the *London Lancet*, under date of January 28th, 1861, writes to that journal, that M. Duchenne, of Boulogne, had discovered a new pathological condition, which he describes under the name given above. The case below given can not be classified with any other *known* disorder, and I felt it my duty to publish it, on account of its variety, and the invariably fatal termination of all reported cases, some fourteen, in France.

On the 10th day of July, 1862, I was called upon to attend Mrs. L., in labor with her ninth child. The labor was a perfectly natural one, nothing worthy of note taking place. It struck me, however, that when she spoke it was with a certain effort, as if it came through the nose, and as if her tongue were heavy, resembling a drunken man's babbling. On further inquiry, she told me that she had been afflicted in this way for five or six months; that she was perfectly well in the forenoon and part of the afternoon, but invariably towards evening she had difficulty in swallowing and speaking; that at times the water she attempted to drink would return through her nose, and solid food would stick fast in her gullet; it would also accumulate between the gums and the cheeks; which latter, in speaking, would keep flapping to and fro, as if there was no life in them. I could discover no abnormal condition of any of the organs. Appetite good; bowels regular; urine free; no tenderness any place; free from headache; pulse regular and natural. The thyroid gland was considerably enlarged. It seemed to me at first that the case could, without violence, be classed with malarious disorders, considering the intermittent character of the disease. I therefore placed her upon quinine and iron. Finding no improvement whatever at the end of a week—rather getting worse, uninterruptedly, as she had been doing before she took any medicine—I began to suspect that I was in the wrong path. Studying the case very closely, I came to the conclusion that it was a case of *progressive paralysis*. This seemed now clear enough; but what was to be done? All cases known as such had terminated fatally, and I was debating with myself whether I had better tell her so. For several reasons, however, I thought best to await the result of further treatment. I put her on strychnine and iron. After two weeks, no improvement whatever. The paralysis begins sooner in the day, is more complete, and therefore puts her to more inconvenience. She is hardly ever quite free from it. Sometimes goes to bed hungry, being almost unable to swallow. She can scarcely make herself understood, and is getting very weak, being hardly able to attend to her household duties. The thought came into my mind whether the enlarged thyroid *might* not have something to do with the troublesome disease. M. Duchenne has not mentioned anything about the thyroid gland, and it is not likely that an observer of his stamp should overlook such a state of things. I resolved, authority or no authority, to try and diminish the size of the thyroid, and to effect this, ordered tinct. of iodine applications, twice a day. This had no effect, except making the parts very tender. I therefore changed to mercurial ointment, and gave her iod. of mercury, gr. j. twice a day, continuing the iron and strychnine three times a day. From this time, about the middle of August, she progressed satisfactorily, the thyroid diminished considerably, and in two weeks her husband reported her "*well*"—about as well as she ever had been. The iod. of mercury had been given only about a week. She was advised to continue the strychnine and mercurial ointment for some time longer. I did not hear anything of her for several months, and believed that I had effected a lasting cure. On the fifth of December I happened to be in the neighborhood where she resided, and meeting her husband, he requested me to see her, as she had "*a touch of her old disorder.*" I went to see her, and found her pretty much the same as when I had seen her the first day. Her bowels were somewhat costive. Not having the requisite materials at hand, I merely left her a laxative, and told her husband to get the medicine I would prepare, at my house, the next day. He did not come. About six or eight weeks after that, I heard she was dead. What treatment was followed, I am unable to say; but I was told that a physician had been in attendance. The question is, is enlargement of the thyroid a constant companion of this disease? Does it stand in any relation of cause and effect? And, as marked improvement followed the course followed, would the patient have been saved by a renewal of the same treatment? Experience only can solve these questions.

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Earache.—M. Duval says he has found relief in severe earache, other means failing, from a mixture of equal parts of chloroform and laudanum, a little being introduced on a piece of cotton. The first effect is a sensation of cold, then numbness, followed by scarcely perceptible pain and refreshing sleep.—*Brit. Med. Journal.*

Proceedings of Societies.

Proceedings of the Cincinnati Academy of Medicine.

Reported by W. T. BROWN, M.D., Secretary.

HALL OF THE ACADEMY, Monday evening, March 2, 1863.

This being the time for the annual election of officers, the regular order of business for the evening was suspended, and the Academy proceeded to ballot with the following result:

President	Dr. R. R. MCILVAINE, re-elected.
First Vice President	Dr. S. O. ALMY.
Second Vice President	Dr. T. ROELKER.
Recording Secretary	Dr. W. T. BROWN, re-elected.
Corresponding Secretary	Dr. E. B. STEVENS, re-elected.
Treasurer	Dr. W. H. TAYLOR, re-elected.
Librarian	Dr. W. P. THORNTON.

Dr. McIlvaine—Returned his thanks to the Academy for the honor conferred upon him for the second time, in re-electing him as its presiding officer. He spoke at some length of the proceedings of the Academy during the past year. He thought the discussions had been of a higher character,—that they were less personal. He remarked that the Academy had done good both positive and negative: positive good in the fact that the discussions were more interesting and valuable in a scientific point of view; negative good in that the mode of treating disease as pursued by the older members of the profession had been criticised by the junior members as being attended with great fatality; this had led to free discussions, and the production especially of statistics from the records of the Commercial Hospital, showing these assumptions to be incorrect, and, indeed, on the contrary, highly favorable to our elder brethren.

Whatever errors had been committed by him as the presiding officer of the Society had been unintentional, and he believed had been overlooked by the Academy from the fact that there had been no appeals from his decisions. He felt complimented in being sustained, and that by a very large vote; and he felt he was renewedly bound to consecrate his energies for the advancement of the original objects of the Academy. He also spoke of the Academy extending its means of influence and usefulness by instituting itself into a permanent incorporated body. He hoped to see the Academy taking early steps for the accomplishment of such a measure; it would enable it to do more good, and exert a greater influence upon the profession.

Dr. Murphy—Followed in some general remarks. He gave, in a brief way, a sort of history of the Academy and what it has done. He remarked that age alone gives no respectability, but talent itself. Expressions made here are for the benefit of the profession. Twenty years ago it was a bitter pill a man had to swallow who attempted to oppose the views of his seniors.

The Academy had made men read. Again, it has established in this city a school of medicine: by that he did not mean a mere didactic school; but we have been enabled to find out what is running through the minds of the profession,—we have amongst us a philosophy of medicine. Bad influences in the profession have been pressed out. Now, one man can criticise the opinions expressed by another, without being considered derogatory or personal.

The discussions in this Academy compare favorably with those of any Society in the United States. He thought it the duty of every man to come here with one purpose, to elevate his profession and make a better man of himself.

He spoke also of the suggestion of the President, of the Academy becoming an incorporate body, and thought well of it. He thought we should endeavor to secure a suitable building as the permanent property of the Academy. Being thus located, we would then be in a condition to gather about us a library, cabinet, etc.

MONDAY EVENING, March 9th.

There being no essay or regular report, the President called for reports of cases.

Dr. Stevens.—Said he was attending a case of some pathological interest. A little girl, aged 13, had been attending school in the country, and was taken ill three or four weeks ago. There were some dropsical symptoms, so far as he could gather the history of the case, and he suspected some rheumatic complication, though this was not well defined. When called, eight days ago, to see her, there was œdema of the feet and ankles, pain through the hips, tongue furred, very restless, unable to lie down on account of the pain in the hips, a large tumefaction over the region of the kidneys, extending over the spine as a bridge; pulse 130; urine scanty, high colored and muddy. There is a rasping sound of the heart, corresponding to its first sound. On examining the urine, there is a strong acid reaction; no albumen; made no careful test for *its salts*. Suspected the rasping sound of the heart to depend upon fibrinous deposits on the tricuspid and mitral valves.

The treatment has been mainly alkaline—the nitrate and acetate of potash,—and she has rapidly improved, so that to-day she is nearly convalescent. The peculiar sound of the heart continued for three or four days. The urinary secretion is becoming more healthy; the tumefaction over the spine has disappeared; and in all respects her condition is vastly improved.

DIPHTHERIA.—*Dr. Murphy*—Said there were a large number of cases of diphtheria reported in the city, and he was of the opinion that many of them were not true diphtherite. Many persons style a single follicular inflammation of the fauces diphtheria. Now, the pathological indications necessary to constitute true diphtheria shall be a false membrane, covering the mucous surfaces of either the soft palate, velum, tonsils or pharynx, the mucous membrane of the anus or vagina. Last Friday week he was called to see a little girl, ten years of age. She had been sick three days. He found the glands of the neck, sublingual, submaxillary and parotid, very much swollen, so that the neck, instead of presenting a concavity, presented a convexity. He could barely get her mouth open sufficient to see a false membrane reaching over the soft palate, velum and tonsils. The odor was that usual in such cases; pulse 125. She talked with great difficulty. Heat of skin above natural. He prescribed 20 drops of the officinal mur. tinct. iron every three hours, chlorine water as a gargle, beef essence, whisky punch, etc. He went away on Monday night, leaving her in charge of his friend, Dr. Bonner; but before he left, he wrote a new prescription for the officinal tinct. of iron. Dr. Bonner carried out the treatment in his absence, except having her gargle her throat with a solution of nitrate of silver, 30 grs. to the ounce. On Saturday he saw her again, and found the false membrane had sloughed out, leaving ulcerated edges. She is now going on very well. This case he regarded as true diphtheria.

TYPHOID FEVER.—Dr. M. also reported a case of typhoid fever, in his practice. The patient is a boy fifteen years of age, presenting all the symptoms of true typhoid, except the rose-colored spots. He was, as it were, in a state of vegetation for several days—perfectly stupid most of the time. The crisis was manifested by a hæmorrhage from his bowels. Reaction came on. He prescribed brandy freely, turpentine emulsion, and beef essence.

He had seen seventeen or eighteen cases of true typhoid fever in the last two months, and they all positively demanded stimulants, though in some the rose-colored spots were not present. He did not try to control the diarrhœa, because, under the use of astringents, the tongue becomes drier.

Dr. John Davis—Inquired whether Dr. M. regarded the presence of rose-colored lenticular spots a bar to the use of stimulants.

Dr. Murphy—Said he did not.

Dr. Thornton—Took exception to the use of the word *crisis* in regard to the occurrence of hæmorrhage from the bowels in typhoid fever. The ulceration arises from ulceration or denudation of the mucous membrane of the bowel, and he could see no favorable indication from the occurrence of hæmorrhage.

Dr. Murphy—Said when he used the word *crisis*, he used it in this sense: that on certain days, or in certain stages of the disease, we expect certain changes to take place. We do not consider the occurrence of hæmorrhage favorable; but if the patient lives through it, we make a favorable prognosis. Now, where does this hæmorrhage come from? It does not always occur from ulceration. It may exude from the mucous membrane of the bowel. It sometimes comes from the mucous surface of the mouth or nose, or ears or lungs.

LUPUS.—*Dr. John Davis*—Presented a patient to the Academy with *lupus exedens*, the common synonym for which is *noli me tangere*. This is a very rare disease. It commenced in this man five months ago, at the outer canthus of the right eye, commencing by a tubercle, and extending beneath the eye to the alæ of the nose. The cicatrix has drawn the lower eyelid very much from its natural position. Dr. Davis also recalled to the minds of the members of the Academy the case presented some time ago, by Dr. Almy, of *lupus non exedens*. There is also a third variety called lupus erythematosus. Lupus is a tubercular disease, ulcerating in character.

BELLADONNA.—*Dr. Stevens*—Reminded the Academy of some suggestions and experience of Dr. Comegys, in the use of ext. belladonna as a remedy in certain forms of headache. Dr. S. said that recently he had used this drug for its anodyne properties, with most excellent effect. He was called to see an old lady of 60 or 65 years of age, suffering from distressing wakefulness. She explained that she had an idiosyncracy forbidding the use of opiates in any form. Various physicians had tried opium repeatedly, in attacks of this character, with the uniform effect of increasing the difficulty, exciting and perverting her nervous system, but not soothing. Dr. S. directed the ext. belladonna, in one-fifth grain doses, every four hours, with a prompt anodyne effect. She slept that night as sound as a child, and to show that this was not an accidental effect of the medicine, on every recurrence of her wakefulness since, a single powder will secure a good night's rest.

Correspondence.

BOSTON, MASS., March 11, 1863.

MESSRS. EDITORS :—The medical commencement of Harvard University took place to-day, at the Medical College.

The Governor of the Commonwealth, the Trustees of the University, and a large number of professional gentlemen, were present to witness the closing exercises. Prayer was offered by the President, Thomas Hill, D.D. Dissertations were read upon the following subjects: Malignant Anthrax; Acute Articular Rheumatism; Acadian Climatology; Delirium Tremens; Croup, and Lead Disease. All of these productions were highly creditable to the young gentlemen who were called upon to read their theses in public. According to custom, in conferring the Degrees, President Hill addressed His Excellency, the Trustees, and the graduating class, in Latin. Forty-two gentlemen received the honors of the College.

Dr. H. T. Bowditch pronounced the farewell address. The subject of his valedictory was, "The Medical Profession—its noblest aspirations, the fair opportunities it confers in the development of the whole nature of man, and a few of its highest duties and obligations." The address will probably be published, as it should be. It was elevated in tone—at times elegant and pathetic, even to calling forth those deep and profound emotions of approval, which are manifested by the moistened eye and the benignant smile. A vein of true Christian philanthropy ran through the whole production, and no listener could turn away without feeling a greater love for his profession, and a greater interest for those committed to his care.

The Reports of our State Institutions, for the year 1862, contain a vast amount of statistical facts and data, some of which I propose to notice at this time.

The Reports of the Trustees and Superintendent of the State Lunatic Hospital at Worcester, are full of interesting details, showing that this institution, which has been dispensing its blessings for thirty years, is still as vigorous and useful as at any former time.

600 patients, 292 males, 308 females, have enjoyed its privileges

during the year ending Oct. 1, 1862. At the beginning of the year there were 379 inmates, 184 males and 195 females. Admitted during the year 221 — males 108, females 113; discharged recovered, 124 — males 58, females 66; discharged improved, 18 males and 21 females; not improved, 5 males and 2 females. There were 34 deaths — 11 males and 23 females. Remaining in hospital, 396 — males 200, females 196. The recoveries were in the ratio of 56.01 per cent. to the whole number admitted, or 20⅝ per cent. to the whole number under treatment. More were admitted during the Fall and Spring months than at other seasons of the year.

Acute and chronic mania, and melancholia and dementia, were the more prominent forms of disease among those admitted. The causes of these are too numerous and varied to be recorded here.

During the nearly thirty years of its operation, the hospital has received 6,633 insane persons. Of these 3,131 have been restored to health and usefulness. 1,200 of the remainder were improved so that they could live at their homes, and partake, in part, of the comforts and blessings of society. Of those who remained in the hospital, 23 per cent. were paying patients, 31 per cent. town paupers, and 46 per cent. State paupers. These proportions are widely different from the proportions of these classes of the insane in the whole State, which are in the ratio of 42.17 per cent. of all, and 31.49 and 26.33 per cent.

The whole experience of the past shows that insanity is one of the most curable of serious diseases, if it is treated properly, in its incipient stages. The hospital records show that from 70 to 90 per cent. are restored, if received within a year after the attack. The chances of success diminish from year to year till the fifth, when the cases are considered as nearly all incurable.

During the seven years from 1855 to 1861, 5,117, or an annual average of 731, were admitted to all the lunatic hospitals in the State; showing that one in 1,616 of the total average population became insane. For the previous four years the average cost of supporting and taking care of the patients was two dollars and seventy-five cents a week. The Report urges, at length, the necessity of a separate institution for insane convicts. The State has no Criminal Lunatic Asylum, for the benefit of a class of persons who ought not to be confined in the same apartments with those lunatics whose lives have never been stained with crime. We hope and trust our State authorities will soon take this matter in hand, and not leave us behind other States in making *provision for this doubly* unfortunate class.

14.6 per cent. of the average number of males in the house labored more or less during the year; and 41.6 per cent. of the females. The real amount of labor may be thus stated: 21,166¼ days' work were done by both sexes in the hospital: 7,522½ by males, and 13,639¾ by females. Employment of some kind seems quite beneficial, as a means of treatment; this, together with the great variety of amusements, does much, not only to invigorate the body, but also to restore reason to its rightful use.

The Seventh Annual Report of the Trustees of the State Lunatic Hospital at Northampton, gives a gratifying view of the continued prosperity of the institution.

332 patients were in the hospital at the close of last year. 149 were males, and 183 females. 112 were admitted during the year — 64 males, and 48 females. 213 males and 231 females were under treatment. 57 males and 37 females were discharged. 9 of each sex died; leaving at the end of the year 332—males 147, females 185.

The statistical tables, showing the ages, nativity of the patient, the causes of insanity, the duration of the disease, the civil condition of the lunatics, the occupation of the male patients, and the causes of death, are all replete with items of interest.

The Report of Dr. Prince, the Superintendent, is full of sound logic, and abundantly shows that all of his energies are deeply enlisted in the work before him. Did space permit, I would gladly make copious extracts, but a brief notice must suffice.

The Doctor argues, at length, against premature removals of patients who have not been long enough under treatment to receive the benefits the institution is capable of bestowing upon them. This arises often from an inability of friends to support the patient longer; or from some mistaken notions of economy, where comfort and the well-being of the unfortunate lunatic are placed in one side of the balance, and the sordid love of gold in the other. Again, in cases where poverty really pinches, the pride of heart forbids to ask that assistance which the law would readily furnish. Patients who have partially recovered, on their removal being surrounded by different influences, often relapse to their former condition, or perhaps to a less hopeful state.

A vivid picture is drawn of those leaving the institution, with reason still impaired, and those where "the cure has been complete before removal," and where the patient experiences the "delightful consciousness of returning reason — the new birth," with the full return of those heaven-born powers which distinguish man from the brute.

Of the 332 patients in the hospital, 220 are foreigners, mostly of Irish birth. This class of patients has been rapidly increasing for the last ten or fifteen years, and the great majority of them are in a state of chronic dementia. What shall become, ultimately, of this unfortunate class is a very grave question, "both from a humanitarian and an economical point of view." It has been suggested that some judicious system of colonization be adopted, as is practised in some countries in Europe. Some of them are capable of performing more or less labor, and would, therefore, be of some benefit, not only to themselves, but to the treasury of the Commonwealth. In an institution like this, the report says, "let us have labor hygienic, but not necessarily profitable. Let it cure, if it may; but, in the name of humanity, do not oblige it to be profitable. Let it soothe and heal and amuse, if it can; but let us look elsewhere for its profits." The report urges the need of some institution where those "*possessed of the demon of intemperance*" may find a home, or resting place.

It appears that this institution has been self-supporting for the past year. The whole report would be interesting to the reader; but I must content myself with this brief outline of some of the topics discussed. In another letter I may give you a *résumé* of other State Reports. B.

Reviews and Notices.

Clinical Lectures on Diseases of Women. By J. Y. Simpson, M.D., F.R.S.E., Professor of Midwifery in the University of Edinburgh, etc., etc. Illustrated with one hundred and two Engravings on Wood. Philadelphia: Blanchard & Lea. 1863.

The volume before us is the collected course of lectures delivered by Professor Simpson, at the Royal Infirmary of Edinburgh, first published in the *London Medical Times and Gazette*, and republished in the *Philadelphia Med. News and Library*. At length complete, they are published in the present tasteful form for preservation and reference. The distinguished reputation of the author is such as to command a respectful attention for all he writes or speaks, and the important group of topics in this book will render it of important value to every progressive and earnest practitioner of medicine.

Two introductory lectures are occupied with the consideration of vesico-vaginal fistula and its treatment. The author gives a very lucid and careful detail of the present surgical treatment of this grave accident, placing the whole subject perhaps in the best shape for easy reference that is anywhere to be found. It is, furthermore, very gratifying to see the genius of our countryman, Dr. Sims, so fully, freely and cordially endorsed, as is done in the course of these lectures, by Dr. Simpson.

Several lectures are devoted to cancer of the uterus. Dr. Simpson, as we think, very properly considers this a disease over which we have little or no control. Its course is sometimes slow, sometimes rapid, but still very sure as to the character of its termination. Nevertheless, under the head of treatment, he points out several very important and suggestive measures, mostly, however, only presumed to be of a palliative character.

Dr. Simpson details, at considerable length, the mode of applying topical remedies, of which he particularly dwells upon chloroform and carbonic acid; and as what he says is all of interest, we quote at some length:

"The carbonic acid has been chiefly employed here within the last few years, and I imagined for a time that this application of it was something new and modern. But I may as well warn you, that should any one of you imagine that he has made a discovery of something practical in medicine, if he will take the trouble carefully to look over the works of Hippocrates, or Galen, or Paul of Ægina, or of some other ancient medical writer, he will very probably get all the glory taken out of him. When the ancient Greek and Roman physicians burnt various herbs the fumes from which were conducted by a tube to the os uteri in cases of uterine pains, ulcers, etc., they in reality applied carbonic acid gas. In Germany the waters of some of the baths, such as those of Marienbad and Nauheim, have long been used as local sedatives to the uterus, and those waters contain always a proportion of free carbonic acid. Dr. Dewees, a distinguished American author, also speaks of having used the pure gas in this way as a sedative for the pains of carcinoma uteri. My attention was first called to the subject by a paragraph in one edition of Dr. Pereira's *Materia Medica;* but Dr. Pereira himself considered this paragraph of so little importance that he expunged it from the last edition of his work. The paragraph was to the effect that his friend, Dr. Clutterbuck, had been requested by a lady suffering from uterine pain and irritation, to be supplied with some means of applying carbonic acid gas to the womb, as she had formerly experienced great benefit from such an application at the hands of an Italian physician. Latterly, I have used it extensively in many cases of uterine pain, and in some with excellent effect; for it is, in fact, a good and powerful local anæsthetic. The application is very easily accomplished. A tablespoonful of crystallized tartaric acid is mixed with a tablespoonful of crystallized bicarbonate of soda in an ordinary wine-bottle, three or four wineglassfuls of water are added, and the gas which is evolved is carried off through a caoutchouc tube, and applied to the womb by means of a gum-elastic nozzle attached to the extremity of the tube. Our chemists have got into the way of supplying patients with boxes such as that I have beside me, containing twelve powders or packets, with six drachms of tartaric acid in each, and other twelve with an ounce of bicarbonate of soda. They furnish them also with the appropriate tubes, which, let me add, are sometimes provided with a sort of brass box (see Fig. 23) immediately above the cork or stopper, to hold pieces of sponge, and by pouring on these sponges some chloroform, you may have the combined sedative action of the two anæsthetics. Usually, however, the hollow cork and tube used are simple, like this (Fig. 24), and without any box; and if you wish to apply chloroform vapor along with carbonic acid, you require, when employing the simple tube, to add merely a teaspoonful of chloroform to the contents of the bottle before introducing the cork. When the tube is introduced into the vagina, after the evolution of carbonic acid gas has commenced, there is perceived first of all a rush, and a slight feeling of heat; by and by a soothing effect is produced. Besides its anæsthetic properties, carbonic acid is one of the best of local curative applications that can be made to an ulcer. In the last century, Dr. Ewart, of Bath, made the experiment of applying this gas to two open cancers of the breast, constantly and for a considerable time, and with this good result, that one healed up completely, though of course only temporarily; and in the other the pain was relieved and the ulcer partially healed. When carbonic acid fails to relieve the pain, the vapor of chloroform may be superadded to it in the manner I have indicated: or chloroform vapor by itself may be applied by means of an ordinary Higginson's (barrel) syringe, which, let me add, is the cheapest, best, and most convenient of all syringes for all purposes. The long or free extremity of the syringe is introduced into the vagina, and the other end of the instrument is inserted into the mouth of a four or six-ounce bottle, about one-third or one-half filled with chloroform, and then the application of the fingers to the middle part or barrel, being in the way of alternate compression and relaxation of the barrel, sends speedily a current through the apparatus. If the bottle were full, or nearly so, there would be a risk of the liquid chloroform getting into the instrument, and being pumped into the vagina, which it would blister and scald, and thus produce an effect quite the opposite of that which is desired. After the tube has been introduced into the vagina, by working the barrel in the ordinary manner, the vapor of the chloroform rises into the instrument, and may be projected for any length of time against the uterus; for you can send through the instrument a current of air or vapor as easily as a current of liquid. Applied in this manner to mucous surfaces generally chloroform vapor has a very soothing and sedative effect. Ten minutes usually suffice for the application at one time, either of carbonic acid gas, or the vapor of chloroform; but patients sometimes desire it to be continued longer. Either of them, or both, may be repeated, *if necessary, many times a day.*"

Opium is one of the most reliable agents for the control of pain, but it frequently disagrees with the stomach of the patient, or very large doses become requisite for the control of the pain. Under such circumstances he advises the inhalation, occasionally, of chloroform, whereby a respite to suffering is secured. But having dwelt so fully on these chapters, we must hasten on to other topics of the course.

Dr. Simpson has devoted much attention to the *questio vexata* of dysmenorrhœa, and in the present course of lectures he has given two, with his usual careful attention, to the clear enunciation of its pathology and treatment. He divides dysmenorrhœa into two varieties, *ovarian* and *uterine*. In treating of the first form we find, in the opening of the second lecture, the following remarks worth noting and bearing in mind:

> " At each menstrual period one or other of the ovaries undergoes, as you are well aware, a variety of changes, which are all essential to the fulfillment of its physiological function, but which, at the same time, bring it into a condition that may be regarded as almost pathological. When at such times an ovum enlarges, comes to the surface of the ovary, and there escapes from its follicle; when such a degree of congestion is required, as shall lead to an effusion of blood into the follicle to favor the expulsion of the ovum, and to fill up the cavity which is left; and when the organ is in a state of such high nervous excitability—then it is easy to conceive how a slight aggravation of any of these phenomena may lead to the occurrence of dysmenorrhœa. It needs but a slight exaggeration of the congestion to produce inflammation; and no great exaltations of the nervous phenomena will be required for the full development of a distressing neuralgia. And besides, from clinical observation we know for certain that the ovary is an organ possessed of a certain degree of sensitiveness, and liable at times to be the seat of pain; for there are some women with perfectly developed ovaries and rudimentary uteri, in whom all the secondary phenomena of menstruation may occur, with the exception of the discharge from the imperfect or atrophic uterus. These women suffer from pain in the back and inguinal regions, and from the other uneasy sensations peculiar to women at the menstrual period; and though the symptoms are not so well marked as in females with all the organs fully developed, yet their occurrence in any degree is sufficient to warrant us in believing that in ordinary cases of dysmenorrhœa, the ovaries may occasionally be the peculiar seat of the pain. I have lately seen two patients who have both suffered for months continuously from pain, and all the other symptoms of dysmenorrhœa, but in whom any other form of dysmenorrhœa than this ovarian form could not properly occur, seeing that the uterus was in both cases altogether absent."

Of the uterine dysmenorrhœa he describes the following varieties: Neuralgic, congestive, inflammatory, gouty or rheumatic, dysmenorrhœa from organic diseases or displacements, membranous, and obstructive. These subdivisions are of themselves very suggestive, even without the accompanying illustrations and views of the author.

Dr. Simpson believes that the great majority, perhaps, of cases of obstructive dysmenorrhœa are the result of a contracted or narrow os and cervix uteri. His original plan of treatment, adopted from Dr. Macintosh, was the gradual dilatation of the passage by means of bougies, of daily increased size ; but latterly, and indeed for a number of years past, as is known to our obstetric readers, he has advocated the immediate division of the cervix, by means of a metrotome, which, at a single operation, makes a free and sufficient dilatation. Dr. Simpson has had such good results from this practice that he now adopts it in all this class of cases, not meeting with any trouble from the resulting cicatrix, as might be anticipated.

But we cannot follow our author regularly through his book. We must commend it to our readers as worthy of their study. Amongst the topics further embraced in the volume, are lectures on surgical fever, phlegmasia dolens, spurious pregnancy, ovarian dropsy, ovariotomy, modes of delivery of obstructive labor, puerperal mania, amenorrhœa, with quite a number of perhaps equal importance in details of actual practice. The whole volume is profusely illustrated with wood-cut engravings of diseased and healthy structure, instruments, etc.

We wish,—and we are sure in this we only express a widely prevailing wish of the profession,—we wish Dr. Simpson would now add a still further favor to the many readers of his works, by presenting us with a complete review of his entire contributions to obstetric literature, condensed in reasonable limits. Such a work would be very valuable for reference, and we believe would be eagerly sought for by medical readers.

For sale by Robert Clarke & Co. Price $3.00.

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A NEW BANDAGE.—A new solid bandage has recently been contrived by Dr. Hamon. The material is gelatine or common glue, to which, being dissolved in water, a portion of alcohol is added. The limb is then padded, where desirable, and a bandage applied. This bandage is brushed over with the solution, and allowed to dry,—this being repeated until sufficiently thick. If then cut open at the side, a stiff but sufficiently elastic sheath is formed, which fits the limb, and can be removed and replaced at pleasure.—*London Lancet.*

Editor's Table.

American Medical Association.—

The next regular annual meeting of the American Medical Association will be held in the city of Chicago, Illinois, on the first Tuesday in June, 1863. Every permanently organized State, County, and local Medical Society is entitled to send one delegate for every ten members, and one additional delegate for a fraction of more than half that number. Medical Colleges, and Hospitals containing over one hundred beds for the sick, are entitled to two delegates; and all other permanently oraanized medical institutions are entitled to one delegate each. The committee earnestly desire a full attendance from all parts of the country.

By order of the Committee of Arrangements.

N. S. Davis, Chairman.

We feel happy that this Association will again resume its meetings. Although it was never regarded with favor by some, yet the great majority of the profession supported it and felt proud of it. It brought together men of a common profession from all parts of a vast country, and gave them an increased regard for each other, a greater love for the noble science and a more abiding enthusiasm in its practice. It is the first and only association of the kind in the country which has commanded the respect of the profession abroad. It has established a code of ethics, which alone entitles it to the respect of every true gentleman. It has stimulated the entire profession. Every one has been watchful of its proceedings. It has elevated the standard of medical education. It has, in one word, been of the greatest benefit to the entire profession. We therefore rejoice that its annual meetings are to be resumed. In addition to the ordinary business in the shape of the reports of committees, there is a great work for the Association to do in vindicating the profession from the slander, misrepresentation and abuse that has been heaped on it since the commencement of the rebellion. The medical staff of the army, and, indirectly, the whole regular profession, has been more abused and their services less acknowledged than any other department of the army. The truth is, that no class of men in the army have performed their duty more faithfully and successfully. It is not the fault of the medical staff that the rebellion has not been crushed. We believe that when the medical statistics of the entire army are published, that it will be found that there never has been so small a mortality in any army. This low rate of mortality we claim is in a great measure the result of the scientific skill of the medical staff. In the face of this fact, many newspapers, and associations calling themselves sanitary commissions, have exaggerated the mortality, decried the ability of the medical staff, and have even charged a want of humanity to it. It may truly be said that our profession has been on trial during this rebellion. Everything has been expected of the staff. It has been required to keep men well, to clothe them, to feed them, and to keep them from death. All this, too, when in many cases it was powerless to enforce sanitary laws, or to provide clothing or food.

We feel much on this subject, and therefore hope that the Association will vindicate the medical staff of the army, and the entire profession. There is no other department of the army in which an examination is required as to qualifications.

In every one of the loyal States, with a single exception, a medical board has passed on the qualifications of every man commissioned as Surgeon and Assistant-Surgeon. Yet in full view of all these facts, the Senate of the United States very recently permitted several of its members to abuse and slander grossly a profession so distinguished for its science, its benevolence and good works in behalf of suffering humanity wherever civilization has a name. We, therefore, hope that the state, county and local societies will send a full representation to the Association, that this whole subject may be thoroughly discussed, and the medical staff and the profession vindicated before the country. We must demonstrate to the people of the country at large that we have been misrepresented by newspaper correspondents, and the travelling busybodies, and enthusiasts of so-called sanitary commissions. We must bring an influence to bear on Congress, and make it feel our power, if we may not influence it by our scientific representations.

The Association must support the Surgeon-General in his efforts to get the rank of the medical staff elevated. This matter is a crying evil, and a great injustice, and needs immediate reformation. Another matter which needs the action of the Association is the present mode of appointing medical officers. The President has appointed the medical inspectors, and in some cases, we but echo professional opinion, when we say that no other qualification was possessed than a political one. The Association, then, should use its influence in having Congress enact a law requiring all medical officers, before being commissioned, to submit to an examination before a medical board. This was the law in the regular army until the rebellion. There are several matters in this connection which will suggest themselves to every observing man, which require to be brought before the Association.

We can not close without alluding to the *questio vexata*, medical education. The medical colleges should be interrogated as to whether they are complying with the resolutions adopted by the Medical Teachers' Association.

We hope to see a large meeting. Full reports may be expected from the various committees. Let every society and medical institution see to it that it is represented.

Army Surgeons.—The State Medical Board for the examination of candidates for Surgeon and Assistant-Surgeon, held a meeting in Columbus in February.

The following gentlemen were recommended to the Governor as qualified for Assistant-Surgeons: S. S. Burrows, A. Buckingham, J. P. Bury, D. J. Boynton, J. W. Pugh, W. H. Crotcher, John W. Driscoll, B. F. Davis, R. J. Hill, Jacob Huber, D. Halderman, E. Hyatt, A. J. Irwin, R. P. Jennings, Jacob Knauff, B. F. Ludlow, D. A. Moore, W. D. McGavrian, W. McMillen, John Morgan, A. J. Miles, E. K. Nash, J. C. Preston, William Richardson, H. M. Shaffer, S. T. Storer, Thos. C. Smith, R. W. Varney, W. E. Thompson, J. B. Mead, W. G. Bryan.

There is still great need of Assistant-Surgeons in the State regiments. Just as we go to press, we have received a note from the Surgeon-General, in which he states that there are twenty vacancies, and that they must be filled very soon.

It is probable that the Board of Examiners will hold another meeting in Columbus in a short time. We hope that there will be a larger representation of the profession present on that occasion, than at the last examination. It may be well for our friends to remember that under the conscription law, they are not exempt, and that in view of the draft under the law, it may be well for them to think of entering the army in their professional capacity, by appearing before the Board of Medical Examiners.

The Board, as at present constituted, is composed of Drs. John W. Russell, of Mt. Vernon, Gustav C. E. Weber, of Cleveland, and John A. Murphy, of Cincinnati. For the benefit of those who may think of appearing before the Board, we may state that every gentleman is required to furnish evidence of having graduated at some respectable medical school; 2. He must give evidence of having a good moral character, and temperate habits; 3. He must submit to an oral and written examination, which in every respect is made practical.

The object of the Board is to obtain good practical physicians and surgeons. The legitimate profession must take care of the sick and wounded soldiers. It is not only for the welfare of the army, but is for the honor of the profession, that none but good men shall be commissioned. Some have complained of the examinations. We are forced to say that no man at all qualified for surgeon or assistant-surgeon has objected either to the written or oral examination. We hope, therefore, for the honor of the profession and the welfare of our soldiers in the army, that there will be a large turn-out of good practical men at the next examination.

The Medical and Surgical History of the Rebellion.—In reference to the preparation of these proposed volumes, the *American Medical Times* says: "The materials now being collected by Drs. Woodward and Brinton, under the supervision of the Surgeon-General, are very abundant and valuable. The illustrations of the work, some of which are already completed as colored lithographs, are in the highest style of American art. The preparation of these volumes will involve a vast amount of labor; but in no way can labor be more usefully expended. We can not over-estimate the value of this great enterprise to military, medical and surgical science."

In this connection we copy from the *Boston Med. and Surg. Journal* the following circular, issued by the Surgeon-General to the profession at large:

Circular to the Medical Profession.—

Surgeon-General's Office, Washington City, D.C., Feb. 20, 1863.

The Surgeon-General would remind the medical profession that some months since a medical officer was detailed by the Department, to prepare the surgical history of the rebellion. It is intended that this history shall embrace, among other topics, the collected results of the gunshot injuries of the war, and of the operations performed for their relief.

Many facts bearing upon these subjects can be obtained by an examination of the returns of the various military hospitals; and explicit orders have been issued to the surgeons in charge as to the manner of reporting. Yet it is found practically that the results of all cases can not be included in these reports. In every depot of wounded, and after every action, there exists a large class of injured men, who, in various stages of convalescence, pass from the observation and treatment of the military surgeon, and are lost sight of by the medical department. These patients are those who are either furloughed or discharged the service, by military authority, before their treatment is entirely terminated. Under such circumstances all past records of these cases are rendered valueless from the absence of a positive knowledge of their results.

To remedy this evil, the Surgeon-General appeals to the profession of the country, and solicits their coöperation. He would ask every physician and surgeon who may be called upon to treat any officer or soldier wounded in service, carefully to note the results of the case, to record his observations, and, when the case shall have terminated, to transmit a copy of his observations to the Surgeon-General's office.

The following form is suggested:—

Date of Communication.

Character of Injury. **Name and Address of Physician forwarding it.**

	Where wounded and date.	To what hospitals sent.	What operations, etc., performed.	By whom performed.	Date of furlough or discharge.	Present condition of patient, Acct. Treatm't, Result.
Patient's Name and Age. Patient's Rank. Patient's Regiment and Company. Postal Address.						

In all cases of recovery after *excisions* of bone, the amount and character of the movements executed by the patient with the injured limb should be accurately described. Where amputation has been practised, the character of the stump should be noted, especially when the operation has been performed through an articulation. In cases of compound fracture, the point of fracture should be stated, as also the degree of efficiency of the limb remaining after treatment. In compound fractures of the femur, the amount of shortening should be measured, and the strength and usefulness of the limb described.

In those patients in whom injuries of the skull have occurred, or upon whom the trephine has been applied, the mental and physical conditions should alike be dwelt upon.

In thus placing before the profession the objects he desires to obtain, the Surgeon-General trusts that he will meet with active coöperation. By the means above indicated, much information that is valuable may be collected, and the interests of the science of Surgery materially advanced. W. A. Hammond, Surg.-Gen. U.S.A.

The Buffalo Medical College held its commencement on the 24th of February. There were twenty-four graduates, Prof. Rochester delivering the valedictory. After the public exercises, the Faculty, graduates and friends partook of an entertainment at the American Hotel, accompanied with the usual flow of good feeling, speeches, etc. On the occasion the Faculty made a complimentary present to their colleague, Dr. Eastman, of a fine case of instruments.

Medical Department of the University of New York.—The annual commencement took place on the evening of March 5th, when the degree of Doctor of Medicine was conferred on fifty-six graduates. The address was delivered by Prof. Metcalfe. The Mott medals were awarded as follows: To F. D. Weisse, the gold medal; G. E. Vantanyan, the silver medal. Also the Metcalfe prizes, three in number, to H. J. Devlin, R. D. Nesmith and W. M. Dorran.

The Starling Medical College of Columbus, Ohio, held its annual commencement exercises on the evening of the 23d of February. Prof. John Dawson delivered the valedictory. The degree of M.D. was conferred on thirty-six graduates.

American Medical Monthly.—The December number of this most excellent monthly journal of medicine has come to hand after some delay, and with it we regret to note the announcement of its temporary suspension, which is owing to the continued absence of its editor and proprietor, Dr. Douglass, who has been engaged as inspector and associate secretary of the Sanitary Commission, since the commencement of this war. We have ever regarded the *Monthly* as one of the best of our exchanges, and we shall miss its visits from our table. No journal in the country had so regularly a larger proportion of able and mature contributions. We trust that Dr. Douglass will be able, at an early day, to resume the publication of the *Monthly.*

Medical Appointments in Indiana.—We cut the following brief list of recent appointments from a daily paper:

11th Regiment—Hospital Steward Wm. Rookwell to be Assistant-Surgeon, vice Rooker, resigned; 20th—Dr. Thos. H. Evarts, Assistant-Surgeon vice Prunk; 23d—Dr. John S. McPheeters, Assistant-Surgeon vice Brucker, promoted; 30th—Dr. E. Bodman, Assistant-Surgeon vice Miller, resigned; David Hutchison, Surgeon vice Myers, dismissed; 34th—Dr. John Grinnell, Assistant-Surgeon vice Taylor, resigned; 39th—Dr. W. G. Scott, Assistant-Surgeon vice Garver, resigned; 47th—Dr. Martin James, Assistant-Surgeon vice Mills, deceased; 54th—Dr. Henry E. Pope, Assistant-Surgeon vice Watson, declined; 70th—Dr. J. C. L. Campbell, Assistant-Surgeon vice Webb, resigned; 73d—Dr. Wm. Spencer, Assistant-Surgeon vice Brenton, resigned; 74th—Dr. John H. Leedy, Surgeon vice Sheldon, resigned; Dr. Jesse K. Thompson, Assistant-Surgeon vice

Bassett, resigned; 77th (4th Cavalry)—Dr. James R. Scott, Assistant-Surgeon vice Thomas; 81st—Dr. W. G. Ralston, Surgeon vice Wolfe, resigned; 87th—Dr. Samuel Higgenbotham, Surgeon vice Pratt, resigned; 93d—Dr. George E. Irwin, Assistant-Surgeon; 101st—Assistant-Surgeon P. P. Whitesell to be Surgeon vice Lent, resigned; Dr. A. W. Dewey, to be Assistant-Surgeon vice Whitesell, promoted.

The Administration of Chloroform — How far is a physician liable for injuries resulting from its application? — We find the following charge of Judge Hare, of Philadelphia, to the jury, in a case tried before him, in the *Dental Cosmos.* It involves points of general professional interest, and we quote it entire:

> The facts in this case, as produced by the testimony, are few and simple.
>
> Beginning in the order of time, the best and most natural order, we learn the following facts:
>
> Nearly a year since, the plaintiff, a driver on the Tenth and Eleventh Streets railway, was thrown from his car by the kick of a vicious mare, his head striking a tree-box as he fell. He was picked up insensible, and carried into the office of Dr. Bishop, who found him some time afterward but partially recovered, the unconsciousness being probably due to the blow on the head. He left the office some two hours thereafter and returned to work the next day. There is no evidence that he was ill afterward, while there is no precise record of his symptoms. We next find him complaining of the toothache, and going to Dr. Winslow's office with the express purpose of having teeth extracted under the influence of chloroform. The chloroform was administered, but did not operate as soon as usual, exciting rather than tranquilizing the patient, and causing resistance. Insensibility—the object required—having been finally obtained, Dr. Winslow performed the operation, the chloroform being administered from time to time, on symptoms of returning consciousness. The patient walked home a short time afterward, complaining of dizziness, and of a tendency to totter — no unusual effects of chloroform or of partial intoxication. He reached home, and still complained, but was not incapacitated from performing his work until Thursday night, when he was struck with partial paralysis, whose effects have not yet disappeared.
>
> The question at issue is whether this is attributable to the neglect of Dr. Winslow.
>
> The defendant is not answerable unless two things appear. First—"That he was guilty of neglect or want of skill in administering chloroform;" and second, "that the disease which followed was the result of use of this remedy."
>
> On the first point it has been well said that the negligence must exsist either in the use of the remedy itself or in its unskillful application. The highest medical evidence has been brought to bear on the

point, and a number of surgeons examined, who all, with one exception, testify that chloroform is an acceptable and proper agent, even in minor surgery, sanctioned by science and experience, Dr. Gross being especially distinct and clear that chloroform may be used with propriety, not only in capital operations or where the pain is likely to be severe, but to obviate the comparatively trifling suffering from the extracting of a tooth or the opening of a boil.

The evidence shows also that Dr. Winslow is skillful in his profession, and especially conversant with the administration of chloroform, being called upon by eminent surgeons to give it for them. This, in the absence of proof, affords a presumption in favor of his skill in the particular instance in question. There is nothing from which malpractice can be inferred, except the length of time during which it was used, and the quantity made use of, the time being longer and the quantity given greater than is ordinarily necessary to produce the effect ; but the scientific men who have been examined have declared that the amount of the dose and the prolongation of its influence are not productive of danger, unless there is a want of proper care.

Testimony of this sort ought to have great weight with the jury, and be decisive, unless there is something to overthrow its force.

We know nothing of the effects of the agents of this description, except from experience, and the records of that experience are to be found in scientific works, and the evidence of men who have made the subject their study.

The jury are, however, to decide on the last resort ; but even if they doubt the safety of the agent employed, there is still a consideration of the highest reason which they ought not to disregard. All science is the result of a voyage of exploration, and the science of medicine can hardly be said to have yet reached the shore. Men must be guided, therefore, by what is probably true, and are not responsible for their ignorance of the absolute truth which is not known.

If a medical practitioner resorts to the acknowledged proper sources of information, if he sits at the feet of masters of high reputation, and does as they have taught him, "he has done his duty, and should not be made answerable for the evils which may result from errors in the instruction which he has received. Medical opinion varies from time to time. What is taught at one period may be discovered to be erroneous at another ; but he who acts according to the best known authority, is a skillful practitioner, although that authority should lead him, in some respects, wrong. He will then have done all that he can," all that is given to man to do, and may leave the result, without self-reproach, in the hands of a higher power.

If, however, you should decide that chloroform was an improper agent, or that it was erroneously administered in this instance, you will then have to consider whether the paralysis was the result of its administration.

Scientific evidence has been adduced on this point also, to show that paralysis is not a natural or even a possible consequence from giving chloroform.

Dr. Gross has said that there is no parallel between that remedy and opium, and that a persistent use of one may be safe, when that of the other would not; and we can readily believe this, because chloroform, being administered externally and volatile, may be dissipated, while repeated doses of opium would accumulate in the system and act at last with accumulated force. Doctors Gross, Goddard, Bishop, and Skillern, all thought that paralysis could not result from chloroform; while Doctors Longshore and Harbeson were of the opposite opinion. But the case cited by Dr. Harbeson may have been owing to the malady, or the operation employed to extirpate the tumor, and not to the chloroform used to lull the pain. Here, as before, you may look to a general consideration to aid your decision on the particular evidence. There is a great variety of temperaments among men, upon which, as we learn in the scientific books in evidence, chloroform produces very different effects.

If we were to traverse the whole circle of mankind, we might possibly find, even among healthy men, some one who could be paralyzed by its influence, or if not, still among the numerous diseases with which man is afflicted, there may occur peculiar conditions of the system in which chloroform may tend to paralysis.

This topic is not irrelevant, because the medical testimony here is, that the severe blow on the head received by the plaintiff might have produced a latent disease only requiring some exciting cause to rouse it to activity.

If the plaintiff was, from previous circumstances, predisposed to paralysis, it might well happen that the extraction of his teeth without the chloroform, or the use of chloroform without the extraction, would bring on a paralytic attack.

Even if this was the case, still it would not be just to make the defendant answerable for consequences which he could not foresee, which were not the ordinary or probable results of what he did. He was only bound to look to what was natural and probable, to what might reasonably be anticipated. There is nothing to show that he was made acquainted with the accident that had befallen the plaintiff, or had any reason to suppose that there was greater danger in his case than that of other men. Unless some such guard is thrown around the physician, his judgment may be clouded or his confidence shaken by the dread of responsibility at the critical moment, when it is all important that he should retain the free and undisturbed enjoyment of his faculties, in order to use them for the benefit of the patient.

The jury returned a verdict for defendant.

The Legal Suppression of Quackery in California.—We observe by the last number of the *Pacific Med. and Surg. Journal*, that a bill was recently before the Legislature of California, the object of which was the suppression of quackery in that State. We are still further pleased to notice that the bill was laid upon the table.

The Chicago Medical Journal calls our attention to a misapprehension in a recent editorial paragraph in which we had spoken of that journal as tardy in its appearance. It seems we were mistaken. We make this correction with pleasure. In the remarks we made, we had no intention of casting any reflection upon our worthy cotemporary› or any others, our object being simply to illustrate the embarrassments which for the past year have surrounded all medical journalism.

Merit H. Cash Prize Essay.—Dr. Merit H. Cash, of Orange county, New York, has recently bequeathed a legacy of $5,000 to the New York State Medical Society. The Society has decided to invest the money and devote its interest as a prize essay fund; and it is also proposed to appropriate from the treasury of the Society an equal amount, devoted to the same purpose and fund. The Society proposes, as a theme for the first prize essay, the following questions: "*How complete is the protection of vaccination; and what are the dangers of communicating other diseases with the vaccinia?*" Competition will be confined to physicians resident of the State of New York, and the essay may be sent in the usual way, with the name of the author in a sealed envelope, to Dr. Thomas W. Blatchford, of Troy, Dr. E. H. Parker, of Poughkeepsie, or Dr. John Ordonaux, 823 Broadway, New York, on or before the 15th of December, 1863.

New York Ophthalmic School.—We have received the following brief notice of the closing exercises of this enterprising school of ophthalmic surgery:

"The New York Ophthalmic School and Hospital held its eleventh Anniversary on the 24th inst., in the Medical College in Fourteenth street, before a large and highly intelligent audience. The names of the graduating class was read by Dr. Mark Stephenson, lecturer on anatomy, pathology, and treatment of diseases of the eye; and the diplomas were presented by Solomon Jenner, A.M., President of the Institution, as follows: A. E. Jenner, M.D., Ohio; J. M. Waddle, Yates county, N. Y.; J. P. Schenck, jr., Dutchess county, N. Y.; W. J. Orton, Broome county, N. Y.; De Witt Webb, Dutchess county, N. Y.; J. H. McCann, M.D., Louisville, Ky.; Robert King, Geneva, N. Y.; H. G. Olmsted, M.D., N. Y. City; James Hutchinson, St. John, N. B.; Charles P. Sanderson, M.D., Ohio; R. J. Mordon, M.D., Canada West; J. H. Chittenden, Binghamton, N. Y.; Thos. Thompson, Delaware county, N. Y.; G. A. Hayunga, M.D., Canada West; J. H. Hunter, M.D., Concord, N. H.; M. C. Rowland, M.D., Washington county, N. Y. The graduates were then addressed in a very appropriate manner, by Marcus P. Stephenson, one of the attending surgeons, under whose instruction and examination they had been during the past winter. The valedictory address was delivered by Alexander E. Jenner, M.D., one of the graduating class, and the exercises of the evening closed with an address by J. P. Garrish, M. D."

Sanitary Commission.—No. 57 of the Reports of the Sanitary Commission is at hand, prepared by Dr. J. H. Douglass, the industrious Associate Secretary of the Commission, and Dr. C. W. Brink, Inspector of the Commission. It is devoted to a review of the operations of the inspectors and relief agents of the Sanitary Commission after the battle of Fredericksburg, Dec. 13, 1862. The battle of Fredericksburg is one of the great and sad events in the history of this wicked rebellion, and all that pertains to its correct medical and surgical history will be read with interest, and deserves to be preserved for future use, experience and reference.

Dr. Douglass had ample opportunity for observation from his position, having been on the ground very shortly after that eventful day. He gives a graphic account of the hospital operations, and the distribution made by the agents of the Sanitary Commission, of clothing, blankets, food, concentrated milk and various necessaries, but it is gratifying to read the record he makes of the full supply on hand and ready for use of all these things prepared by the proper government agents. So, too, of every feature of preparation for the results of a great battle—we find the medical authorities had anticipated every want and necessity. Dr. Douglass, speaking of this matter, says: "Individual cases there were where, from constitutional indifference or inherent slothfullness, the medical officers or the attendants were derelict of duty, but these instances were rare. So infrequent, indeed, as not to affect the general opinion, that no battle since the war commenced has found the medical corps so fully prepared for every emergency, or has witnessed such prompt, careful and judicious performance of the necessary operations, such comparative immunity from suffering occasioned by a deficiency or absence of supplies."

In reference to the general moral condition of the army after the battle of Fredericksburg, Dr. Douglass makes the following statement, which, coming from such a source, may be received with respect: "Much has been said of the demoralization of the army. I have seen no evidence of it. It does not exist in the constitution of the men of our climate to be turned back from any undertaking by one check, or to be disheartened even by a series of obstacles. Their temperament as men is not changed by their discipline as soldiers. If signs are to be believed, the Army of the Potomac to-day is, in firmness of purpose, in discipline, in soldierly qualities, stronger than ever, and more determined to merit by its deeds the high trust and confidence reposed in it by the country."

The Canada Lancet.—We have received the first number of a medical journal with this title, published at Montreal, and edited by William Edward Bordman, M.D. It is brief in quantity, but spirited in style, containing eight large double-column pages monthly, for $1 a year. Our neighbors over the line have not sustained their medical journals with that liberality that was due to the publications or for their own credit and interest. It is but recently that the *British American Journal*, edited by Professor Hall, has been obliged to suspend for want of patronage. We trust that this new candidate will receive such prompt support as to place it on a safe and healthy foundation, which will enable it at a very early day to enlarge its borders.

Dr. W. T. G. Morton and Anæsthesia.—We have received a special report made to the Senate of the United States by Hon. Mr. Wilson from the committee on military affairs, etc., on the petition of Dr. Morton, asking "compensation for the discovery and gift to his country and mankind of the application of ethereal vapor as a safe and practical anæsthesia." The document is a lengthy one, and its careful perusal would doubtless be as effective in sleep-producing results as a dose of the doctor's original lethean. We have, however, read Mr. Senator Wilson's report with some care, and looked over the accompanying appendix with as much patience as we could command. The drift of the report is decidedly favorable to the claims of the petitioner. It does not make any definite proposition. "The committee are of the opinion that some compensation is due," but while submitting the facts for the information of the Senate it does so "without any recommendation."

Most of our readers are well enough aware that there are quite a variety of other considerations besides those embraced in this Senate report. We have, heretofore, discussed these claims in the columns of this journal, and do not care to re-open the question at present. We are quite well pleased that, notwithstanding this favorable report, the Senate did not feel seriously impressed with the propriety of voting Dr. Morton a hundred thousand dollars, or any other sum of money.

Died, at Helena, Ark., Feb. 20, 1863, Dr. CHARLES BRACKETT, of Fulton Co., Ill., Surgeon to the Ninth Illinois Cavalry.

Married, on the 18th of January last, at Liberty, Ill., Dr. FRANK M. AGNEW, formerly of Ohio, and Miss HARRIET E. ELMORE.

Rare Petrifactions.— A friend — Dr. Webster, of Missouri,— has shown us some rare petrifactions picked up in his State. They consist of portions of very perfect hornets'-nests. He says that in some portions of the State similar petrifactions of various objects are quite abundant.

Lindsay & Blakiston's Catalogue of Medical and other Books.— We have received Lindsay & Blakiston's catalogue of medical, surgical and other publications, and must express our pleasure that our old friends give evidence of so abundant a degree of prosperity during these dark days for the interests of medical publications.

Medical Department of the University of New York.—The Faculty of this venerable college is made up of some of the ablest men in this country. It will be seen by their regular announcement, in the advertising department of this journal, that their plan of instruction now provides for a course continuous throughout the year.

Table of Contents.—Twice recently our press of advertising matter has been such as to compel us to omit the usual table of contents, and occupy its space. We have had some complaint of this from some of our friends, and we are aware of the annoyance, for which, however, as we could not very well avoid, we must ask indulgence. We hope to so arrange hereafter, as to avoid cause for this complaint.

——The following veritable letter, received at this office, illustrates in some sort the intellectual capacity of the female professors of midwifery :

March 8.63

* * * please send me A specime number of youre medical Journal if it pleases me I shall subcribe for it is Money sent at your owne risk I practis medison some but Midwifery is my main buisniss. —. —. —.

Death of Dr. Ely.—The *Columbus Fact*, of Saturday evening, states that Dr. E. L. Ely, for several years past First Assistant Physician of the Central Ohio Lunatic Asylum in that city, was seized with apoplexy about one o'clock on Saturday morning, and died about ten hours after. He leaves a wife and child.—*Cincinnati Gazette of March* 24.

Hospital Changes in Paris.—It will be remembered that hospital physicians must, in Paris, retire at 65, and surgeons at 60. This regulation gives rise pretty often to promotions among the staff of Hospitals. The latter is elected by competition, the successful candidates forming, at the central nosocomial office, a nucleus of officers ready to act as substitutes, or take vacant places. They are besides busily engaged, several hours a day, in admitting for the different hospitals patients who apply, as they are expected to do, at the central office. The latest changes have been caused by the resignation of M. Malgaigne, at the Charité, and the retirement, in virtue of the above mentioned regulation, of M. Gilbert, at St. Louis. M. Malgaigne's resignation has taken every one by surprise, and is universally regretted.—*London Lancet.*

The University of Jena has experienced a great loss within a few days. Professor Lehmann, the renowned chemist, and one of the first authorities in his specialty of physiological chemistry, died on the 6th of January, while yet in the prime of life. He had only been connected with the University eight or nine years, and was highly esteemed both as a lecturer and practical instructor.—*Boston Med. and Surg. Journal.*

One of the daily papers in Paris lately announced that Trousseau had been called in consultation to Garibaldi in Italy. The result of this false report was that the well filled consulting-room of this popular physician became at once empty, so that he was obliged to contradict the statement in the public journals. This unlooked-for honor cost the professor nearly $1,000.—*Boston Med. and Surg. Journal.*

The *Presse Méd. Belge* gives two cases in which Langier had employed baths of oxygen gas in senile gangrene with the most favorable result. He inserts the affected part in an ox-bladder, which is connected by a stop-cock and flexible tube with an oxygen apparatus. The bath is used an hour daily. In one of these cases, that of a man 76 years old, with a slough upon the great toe, and several livid and painful spots upon the other toes and back of the foot, the severe pains disappeared after the employment of the bath five days, the affected portions assumed a natural appearance and the sensibility returned. Subsequently the slough fell off, the wound healed quickly, and the patient completely recovered.—*Boston Med. and Surg. Journal.*

Chinchona.—The experiment of planting quinine-yielding chinchonas at Darjeeling is successful. The number had increased from 1811 in July, to 2286 in October.—*London Lancet.*

Editorial Abstracts and Selections.

PRACTICAL MEDICINE.

1. *Diphtheria Extending to the Nose and Throat.*—Richard B——, coachman, aged 39, was admitted into John ward, Guy's Hospital, under the care of Dr. Gull, on the 22d of March last. He had been taken ill two days before, and had lost two children with diphtheria. On admission he was very ill. His throat inflamed, but no very decided pellicle upon it. Nitrate of silver was applied, and wine and nourishment ordered. Subsequently his throat became so much swollen that it was difficult to see into it; his breathing also became distressing, and his nose affected. From the latter there came a very fætid discharge. On the night of the 24th, he was suddenly seized with dyspnœa, and tracheotomy seemed absolutely necessary; he slowly, however, regained his breath, and the operation was not performed. On the following day he was much the same; great and fætid discharge from the nose. It was thought then that he would rally and get through the disease; but he afterwards rapidly sank and died on the 28th. The urine at first was not albuminous, but during the last four days it was highly so, and contained deposits of inflammatory casts.

Autopsy twenty-eight hours after death.—The pharynx, back of tongue, and larynx had been affected by the disease, as well as, no doubt, the nostrils. All these parts had an excoriated appearance, and were now exuding a purulent mucus of a very fætid greenish color; the surface very soft and apparently sloughy, particularly on the left side. The soft palate was much swollen and red. The back of the tongue had an excoriated appearance, as far as the middle, where a thin membrane existed which passed into the mucus towards the tip. It was thus pretty clear that the material discharged during life had come from these parts,—i. e., the tonsils, palate, and back of tongue. On opening the pharynx, the walls were found to be extremely thickened by inflammatory exudation into them, the muscle itself appearing red and swollen. The sloughy condition of the left tonsil was continued down into the left pharynx as far as the œsophagus, the mucous membrane being of a greenish color, very soft, and broken up. The epiglottis and glottis were much swollen, and had in some parts a raw bleeding surface, as if a membrane had lately been torn from them. The interior of the air passages showed more or less plastic inflammation throughout. On the vocal cords were small pieces of membrane, which appeared to have become entangled in the sacculus. Below this was much fætid purulent mucus on the surface as far as the division of the bronchi. Below this, again, the tubes contained shreds of membrane; these were not lining them, but, being loosened, blocked the smaller vessels. In some of these, on being opened throughout, the lining portions were met with; and everywhere much purulent mucus was seen exuding from the cut tubes. The lungs were highly congested, presenting a spotted, apoplectic appearance. In the left lung were numerous masses of effused blood, in the midst of which was hepatized lung, or rather it might be said there were masses of hepatized pneumonia surrounded by highly congested lung-tissue, and in places by actual effusion of blood. Over these spots were thin films of lymph in the pleura. A very small white clot was present in the right side of the heart. The kidneys were congested to the naked eye, and acutely inflamed under the microscope, the tubules being filled with dark albuminous product.—*London Lancet.*

2. *Diphtheritic Paralysis affecting the Throat and Lower Limbs.*—Diphtheria differs from all other affections in the sequela of paralysis affecting various parts of the body, depending upon causes which are differently estimated by writers on the disease. M. Tornaselli, of Sicily, considers the paralysis as depending upon the poisoned state of the blood, and this is the view commonly entertained by a large number of pathologists. In the very great majority of instances, the paralysis first affects the pharynx and velum palati, extending to the larynx; and the peculiar usual twang, with dysphagia, are present. In some cases the entire muscular system is affected, and the most extreme debility exists. The treatment should consist of the most generous diet, with wine, as also iron, and small doses of strychnine; and if this is carried out early, good results usually follow.

W. B——, aged fifteen, a gas-fitter, was admitted on the 7th of February, 1861, to St. Bartholomew's Hospital, under the care of Dr. Farre, with extreme debility after an attack of diphtheria a month before. He had the peculiar usual twang of throat palsy and some dysphagia; yet, on looking into the fauces, nothing was noted worthy of mention. He was very weak about the legs, and could scarcely walk without assistance. He was put upon generous diet, wine and beef tea, and ordered quinine and sulphate of iron thrice a day. He was the subject of hypertrophy of the heart, from old rheumatic disease, and had an intermittent pulse. He gradually improved, and had quite recovered his voice and natural intonation by the 25th of March, but he still remained so weak about the legs that he could scarcely walk at all. It was a mild form of paraplegia at this time, and subsequently became almost complete for a short period. Under the use of one-fortieth of a grain of strychnine thrice a day this symptom yielded. On the 20th of May the report states that he had gradually recovered from the paraplegia, but had had an attack of heart disease, with a double friction sound, and pain felt at the apex. A blister reduced it to a friction, only at the second sound, and afterwards it disappeared. By the end of May he left the hospital convalescent.

A young woman was admitted on the 30th of December, 1861, also under Dr. Farre, with debility and hoarseness after diphtheria. Dyspnœa became very urgent, and tracheotomy was performed. She died two or three days afterwards, and at the autopsy we learned that nothing special was discovered in the larynx. The case, however, formed the subject of a clinical lecture by Dr. Farre.—*Ibid.*

2. *Prevention of Scarlet Fever.*—I have for some years now, in the prosecution of my practice, paid special attention to scarlatina; and as I have been very successful in its treatment, and in the means I have adopted to prevent infection among the other members of the families in which it has existed, I consider it my duty to draw the attention of my medical brethren through *The Lancet*, to the means employed, and the results achieved. After a good deal of thought and observation, I have been led to the conclusion that if we, in treating a case of scarlet fever, induce diaphoresis and sustain it for some time, we shall be able to eliminate from the blood the organic poison peculiar to it. Acting on this belief, I have for the last few years pursued the treatment just indicated with the best and happiest results, almost all my patients so affected becoming rapidly convalescent.

For the last three years, when called to a case of scarlatina, I have been in the habit of administering to those children of the family not affected with the fever a gentle diaphoretic, in the belief that by so doing the poison will be eliminated as it is absorbed. Whether the theory be correct or not, let me call special attention to the result.

During the period above indicated I have attended more than twenty-five cases of scarlet fever, in the dwellings in which the cases occurred more than seventy persons, who never had the disease, were exposed to the poison, and not one was affected who took a teaspoonful, thrice daily, of the following mixture: Antimony wine, two drachms; sulphate of magnesia, half an ounce; camphor mixture, to four ounces.

Dr. Gregory, in his lectures on "Eruptive Fevers," states, on the authority of Dr. Binns, that 184 out of 216 scholars at Ackworth were affected, or 85 per cent. Perhaps this is an unusually large proportion; but few can doubt that at least 60 per cent. are seized with scarlatina after exposure.

The object I have in bringing this subject before your readers is to solicit a trial of this preventive treatment from such as may have large hospitals or schools under their charge, in which many children reside. I would suggest to such as feel inclined to try it, to see that the medicine is actually taken; for it is only natural that children who feel quite well should resist taking it, and it often happens that even parents are slow to adopt preventive means, be they ever so simple.

I hope, however, to see the day when the mortality from scarlatina will be much diminished by greater attention being paid to the health of those who, unaffected by it, are still exposed to its poison.—*R. C. Furley, L.R.C.S., in London Lancet.*

3. *Cases of Variola treated with Sarracenia Purpurea.*—L——, aged 14 years, never vaccinated. When first seen (November 15th), the eruption of variola was in the papular stage, thickly spread over the face and extremities, promising confluence; less thickly over the trunk. Previous pyrexia, headache, and bilious vomiting severe. Ordered, decoction of sarracenia purpurea, as prescribed by Mr. Miles

in *The Lancet*, October 18th, 1862. The patient was seen daily up to the 21st, the eruption displaying the regular stages without unusual change, and becoming confluent upon the face. The secondary fever was severe, and attended with delirium ; but desiccation of the eruption thereafter proceeded favorably. There was no diuresia ; diarrhœa was present from the fourth to the sixth days of the eruption, and was succeeded by constipation, for the relief of which castor oil was ultimately ordered. By Nov. 26th the boy was convalescent. The diet was of diluted milk and farinaceous food throughout.

B——, aged 3 years ; never vaccinated. Was first seen on October 28th, when the eruption was papular, just forming in the skin. A diaphoretic mixture had been ordered, which was continued till the morning of the 30th, when the eruption had reached the vesicular stage, the vesicles being full and prominent. The eruption was so thickly spread and universal, and presented such an evident tendency to confluence, that it appeared a good case to test the sarracenia, which was accordingly at once supplied, and given in tablespoonful doses.

Oct. 31st.—Considerable febrile disturbance ; vesicles becoming pustular ; *has had the bowels freely moved, and passed a good deal of urine.*

Nov. 1st.—Child exceedingly restless ; can not be prevented from rubbing its face and denuding the pustules of their coverings ; parts of the face so rubbed are quite raw ; those portions which are untouched, *as the forehead, and the pustules upon the neck and chest, are much flatter than usual, and the skin around them has lost its previous inflammatory blush and become pale.* Considering, therefore, the statement in page 430 of *The Lancet* (October 18th), under the head *Observations*, that "after the second or third dose, given at intervals of from four to six hours, the pustules apparently lose their vitality ;" and again, "the pustules appear simply to lose their vitality, they desiccate and fall away ;" and further, considering that among the alleged salutary effects of the sarracenia "rapid diuretic action and power of evacuating the large intestine" are cited, it was believed, notwithstanding the restlessness, that the results of the trial were so far confirmatory of the good effects of the new remedy.

2d.—On visiting the residence of the patient, the child was found to have died late on the previous night.

Query.—To what were the flattening of the pustules and the disappearance of the inflammatory areolæ due ? to retrocession or the sarracenia ? The latter got the dangerous and delusive credit assigned it till it was too late to pour in stimuli to rouse the sinking vital powers. The mother of this child asserted that from the moment the first dose of the new medicine was given the child began to change for the worse.—*David Goyder, M.D., in London Lancet.*

4. *Bromine as a Prophylactic in Erysipelas, Diphtheritic Affections, etc.*—M. Goldsmith, Surgeon U.S.V., Superintendent of Hospitals at Louisville, Ky., communicates the following to the *American Medical Times :* I desire to draw the attention of your readers to the use of bromine in the *prophylaxis* and treatment of erysipelas, diphtheritic

affections, and in hospital gangrene. This agent has been used in the various hospitals in this district with very important results, in the following particulars:

1st. As a prophylactic in wards where cases of erysipelas have broken out.

2d. In the treatment of erysipelas and diphtheria by the inhalation of the vapor and by topical applications of both the vapor and fluid.

3d. In hospital gangrene and in all sloughing sores by the topical application of the solution of bromine in the bromide of potassium.

I subjoin the directions for the use of the bromine for the purposes above indicated. These directions are prepared at the request of Surgeon Perin, Medical Director of the Army of the Cumberland, who in conjunction with Medical Inspector Lyman, Surgeon U.S.V., is now introducing the use of the bromine into the General Hospitals at Nashville and Murfreesboro, Tenn.

The compound solution of bromine is prepared thus: Take of bromine, one Troy ounce; bromide of potassium, one hundred and sixty grains; distilled water, enough to make four fluid ounces of the entire mixture.

Directions for Use.—(*a.*) For Fumigation: Place vessels, containing one ounce of the solution, at different points of the ward, and in number sufficient to secure in the latter the constant presence of the odor of bromine.

It should be borne in mind that, if the vapor of bromine comes in contact with the vapor of water, hydro-bromic acid is formed; therefore, when there is much of the vapor of water disengaged in the apartment, the quantity of the vapor of bromine must be correspondingly increased.

(*b.*) Topical Application of the Vapor: A piece of dry lint is to be placed over the diseased part; over this is to be placed another piece of lint, moistened with the solution of bromine; over this, a third piece spread with simple cerate; the whole to be covered with oiled silk and bandage, so arranged as to retain the vapor in contact with the diseased surface as long as possible. The solution is to be removed as often as it becomes exhausted by evaporation.

(*c.*) The Solution, in Substance, as a direct Application, in Hospital Gangrene, Diphtheria, Gangrene of the Tongue, and other diseases of this nature: The parts are first to be dried by the application of charpie; then the sloughs, if thick, should be trimmed out with forceps and scissors as much as possible, for the thinner the slough the more effective is the remedy. The parts having again been dried, the solution is applied by means of a mop, or a pointed stick of wood, in quantity sufficient to saturate the sloughs. If the sloughs undermine the skin, or dip down into intermuscular spaces, the solution must be made to follow, with the pointed stick, or by means of a glass syringe.

If the application has been effectual, all odor from the diseased surface ceases, and the sloughs become somewhat hardened. The remedy should be re-applied every second hour, as long as any odor of putrefaction is present, or as long as the sloughs appear to be diffluent. It is not always necessary, especially when the sloughs are diffluent d thin, to use the solution in its full strength ; it may be weakened the addition of water, as the disease subsides.

The points to be especially attended to, in the use of the solution bromine, are two : 1. The solution should be applied in strength d frequency sufficient for the impregnation of the whole of the ughs ; 2. To secure this end, the application should be made by the rgeon himself, and never be trusted to a nurse. If the sloughs are ck and can not well be trimmed, the bromine may be introduced o the thickness of the slough by means of a hypodermic syringe.

After the topical application of the solution, the parts, when so uated as to render it practicable, should be subjected to the influence the vapor. See par. (*a.*)

Surgeons will do well to bear in mind that bromine is a new nedy for the purposes indicated above. The directions for its use, ven here, are those followed in the military hospitals of this city ; may be found advisable to modify them as experience with the nedy accumulates. It is, therefore, earnestly recommended that subject be studied diligently, that the effects of the remedy be refully watched, and that the application be varied as new facts are veloped in its use.

5. *The Hypophosphites.*—Hypophosphite of Lime: To one Troy und of freshly burned lime, add 1½ gallons (wine measure) of hot ter and ½℔. phosphorus. Boil them together in a water bath, ding the phosphorus piece by piece, until it is all decomposed ; ich will require upwards of twenty-four hours. It should be made a new three-gallon tin oil-can, with a mouth not exceeding two hes in diameter, which must not be obstructed ; and the operation performed in the open air. After filtering, pass carbonic acid rough the solution, until a portion of the precipitate thrown down redissolved. It is now to be refiltered, and evaporated with a heat, t exceeding 140 degrees Fahrenheit. Any heat above 220°, in the t boiling, decomposes the Hypophosphites. Carbonic acid is st cheaply generated from chalk and sulphuric acid.

If the remedy is to be prescribed in solution, all that will be necesy, will be to drive off the carbonic acid and filter; when the dose uld be a teaspoonful in milk, three times a day.

Hypophosphite of Soda: Is made by adding carbonate of soda l. soda) to the solution of hypophosphite of lime, so long as it lds a white precipitate ; using great care not to add it in excess ; n filter and evaporate, or give as before. This salt is much asanter to the taste than the former. A good way would be not to d quite enough of the carbonate of soda, then the two salts would in combination ; a favorite manner of prescribing them.

When faithfully prepared according to the above directions, the pophosphites will be found well worthy of a trial in phthisis in all stages ; and to be far superior to any purchased article, in point of ense and purity.

Dr. Churchill says it must be discontinued, should it cause any ling of fullness in *the head, giddiness, singing in the ears*, or bleeding at the nose, however slight. It may be given with the food. I often direct it to be taken in the tea or coffee, where it can not be detected.—*Canada Lancet.*

6. *Obscure Sources of Disease.*—Dr. James R. Nichols, in the *Boston Medical and Surgical Journal*, of March 26, 1863, writes as follows:

There are many instances of disease brought to the notice of physicians which are exceedingly perplexing in their character, and the sources of which are very imperfectly understood. They belong to a class outside of, and distinct from, the usual forms of disease resulting from constitutional idiosyncracies, or accidental causes, within the knowledge of the patient or medical attendant. The obscurity of their origin and persistency under treatment, render them peculiarly trying to the patient and the skill of those who have them in charge, and after the trial of the usual remedies without effect, the patients are sent into the country or to the sea-shore, as the case may be, with the expectation that a change of air or residence may prove beneficial.

We can not, in a majority of cases, regard these affections as altogether imaginary, or as resulting from some casual derangement of the nervous system; they are instances of true disease, and should be studied with the view of bringing to light the hidden source from whence they originate. I am led to believe that a considerable number arise from some disturbance in the sanitary conditions of dwellings or their surroundings, and that however improbable this may seem from a superficial or even careful examination of suspected premises, a still more thorough and extended search will often result in the discovery of some agent or agents capable of producing disease.

The chemical and physical condition of water used for culinary purposes has much to do with health, and is perhaps the oftenest overlooked by the physician in searching for the cause of sickness. We must not suppose that water is only hurtful when impregnated with the salts of lead or other metals; there are different sources of contamination, which produce the most serious disturbance upon the system. Some of these are very obscure and difficult of detection. The sense of taste and smell are not to be relied upon in examinations, as it often happens that water entirely unfit for use is devoid of all physical appearances calculated to awaken suspicion. It is clear, inodorous, palatable, and there is no apparent source from whence impurity may arise.

A few instances which have come under my observation may serve to illustrate the view presented, and as suggestions to those who are in doubt as regards the cases of patients upon their hands.

During the past summer, the writer was consulted by a gentleman residing in Roxbury, respecting the water used in his family. It was taken into the dwelling through a tin pipe from a well in the immediate vicinity, and appeared to be perfectly pure and healthful. Analysis disclosed no salts of lead or copper, as indeed none could be expected from the unusual precautions taken to prevent contact of the water with these metals. Abundant evidence was however afforded that, through some avenue, organic matters in unusual quantities were finding access to the water. Careful examination of the premises disclosed the fact that an outhouse on the grounds of a neighbor was so situated as to act as a receptacle for house drainings, and from thence by subterranean passages the liquids flowed into the well. Some cases of illness, of long standing in the family, disappeared upon abandoning the use of the water.

A few months since, a specimen of water was brought to me for chemical examination, by a gentleman of Charlestown, who stated that his wife was afflicted with protracted illness of a somewhat unusual character. It was found to be largely impregnated with potash and the salts resulting from the decomposition of animal and vegetable *debris*, and the opinion expressed that some connection existed between the well and the waste fluids of the dwelling. This seemed improbable, as all these were securely carried away in a brick cemented drain, and in a direction opposite the water supply. The use of the spade, however, revealed a break in the drain at a point favorable for an inflowing into the well, and hence the source of the contamination. Rapid convalescence followed on the part of the sick wife upon obtaining water from another source.

Analysis was recently made of water from a well in Middlesex county, which disclosed conditions quite similar to these. The owner was certain that no impurity could arise from sources suggested, but rigid and persistent investigation disclosed the fact, that the servant girl had long been in the habit of emptying the "slops" into a cavity by the kitchen door (formed by the displacement of several bricks in the pavement), where they were readily absorbed. Although the well was quite remote, the intervening space was filled with coarse sand and rubble stones, and hence the unclean liquids found an easy passage to the water. This proved to be the cause of illness in the family.

It is unneccessary to present other instances of a similar character on record. These serve to bring to view some of the sources of impurities in water used for household purposes, and the obscure cause of serious diseases. The location of wells connected with dwellings is a matter which should receive attention at the hands of physicians.

It is well known that in the gradual decomposition of animal and vegetable substances, at or near the surface of the earth, under certain conditions, nitrogeneous compounds are developed. The nitre earths found beneath old buildings result from these changes, although it is quite difficult to understand the precise nature of the chemical transformations which produce them. In the waters of a large number of wells in towns and cities, and also in the country, the nitrates are found at some seasons in considerable quantities. The salts form at the surface in warm weather, and being quite soluble, are carried with the percolating rain water into the well. In cities and large towns, where excrementatious matters accumulate rapidly around dwellings compacted together, it is difficult to locate wells remote from danger, and hence it might seem that suspicion should be confined to these localities. This, however, *is not* a safe conclusion. How often do we see upon isolated farms in the country, the well located within or upon the margin of the barnyard, near huge manure heaps, reeking with ammoniacal and other gases, the prolific source of soluble salts, which find access to the water and render it unfit as a beverage for man or beast. It may no doubt be a convenience to the farmer to have his water-supply so situated as to meet the wants of the occupants of his barn and his dwelling, but it is full of danger.

Whilst admitting that such may be the condition of the water of many wells, doubts may arise with some, whether substances not decidedly poisonous, and received in such quantities, can after all be productive of much harm, or the real source of illness. To the great majority of people they are certainly harmless, but it must be admitted that there is a class, and one or more are found in almost every family, whose peculiar sensitive organization does not admit of the presence of any extraneous agent in food or drink, or in what they inhale. The functions of life and health are disturbed by the slightest deviation from the usual or normal condition of things around them. It is manifestly of importance that physicians should recognize these peculiarities in individuals. It is unsafe, in making a diagnosis of disease, or seeking for causes, to overlook or forget them.

We are, indeed, incapable of understanding how this can be. It seems incredible that the thousandth part of a grain of one of the salts of lead, dissolved in water and taken daily, will disturb the system of almost any one; and yet such is the case. We can see no reason why a very little nitrate of potash, or soda, or lime, taken in the same way should produce any effects; still stranger is it that the infinitesimal amount of dust dislodged from painted wall-papers, received into the lungs, should make inroads upon health.

Several instances of this latter result have recently come to my knowledge. In two families of the highest respectability in this city, illness of an unusual and protracted character existed, and at the suggestion of the physician, portions of the green wall-paper of the dwelling were submitted to me for analysis. The pigments were found to consist of arseniate of copper, and upon the removal of the papers the illness disappeared. In experimenting with apparently the most suitable apparatus, and employing delicate chemical tests, in rooms the walls of which were covered with these arsenical papers, no evidence of the presence of the poison in the atmosphere has been afforded; and this corresponds with the results of all similar experiments made in this country and in Europe, so far as my knowledge extends. We must conclude that agents not recognizable by chemical tests are capable of disturbing vital processes. The evidence is very clear that in instances of illness confined to one or two members of a household, the cause may be due to some accidental disturbance with which all are equally brought in contact, but which has the power of injuriously influencing but a part. It is also clear that these sources of disease are of such a character as easily to escape detection, and therefore any facts or experience which may serve as guides to their discovery are worthy of record.

SURGICAL.

7. *Fracture with Dislocation of the Spine.— Reported by R. T. Lanyrell, Esq.*—John Lynch, æt. 32, a healthy laboring man, received, on the morning of the 31st December last, a severe injury from a very large beam, weighing, as he says, upwards of a thousand pounds. It struck him on the shoulder and back, prostrating him insensible, in which condition he was admitted into the Montreal General Hospital, under Dr. McCallum, who, on examination, found fracture with dislocation of the 11th and 12th dorsal vertebræ, the former being depressed nearly an inch, and the corresponding prominence of the 12th being very marked. On returning consciousness, he suffered from the most excruciating pain in the thighs, and had lost all power over the lower half of his body. Preparations were at once made to reduce the dislocation; to effect this, the upper part of the body was fixed by passing a sheet around the back and beneath the axillæ, and another being arranged around the pelvis; gradual and powerful extension was made, steady pressure being at the same time exerted over the lower and projecting portion of the spinal column. The dislocation was thus reduced without deformity, and gave immediate relief to the pain, but did not affect the paraplegia. Splints were applied to the vertebræ for a time. The paralysis of the bladder and sphincters, so troublesome after the accident, has gradually disappeared, but up to the present, Feb. 10th, the paraplegia remains unchanged.—*Canada Lancet.*

8. *Chassaignac's Ecraseur.*—Dr. Demel has given in the *Vienna Med. Wochensch.*, a sketch of the present surgical practice in Paris, and is not sparing in his somewhat bitter criticism. He especially mentions an amputation of the arm with the ecraseur performed by Chassaignac. The operation lasted three-quarters of an hour, and required seven applications of the instrument. Whilst the operator was lauding the bloodless mode of section, the brachial artery gave way and had to be tied. Out of the forty-five minutes, the patient, a woman of 67, had, on waking from anæsthesia, to bear the crushing for twenty minutes. Dr. Demel dwells principally on the fact that the disease of the elbow-joint for which the arm was taken off, consisted of the existence of a tumor, two inches in diameter, situated below the olecranon; the joint was with this exception perfectly healthy. The same observer ventures to say that Civiale, though a clever operator, can not be considered a scientific man, for which calumny he is severely chastised in the same journal by Dr. Ivanchich. Dr. Demel finally advises his countrymen to repair to Berlin and Vienna and not to Paris, in order to improve themselves in surgical science and practice.—*London Lancet.*

9. *On the Treatment of Orchitis by Compression.*—The beginning of last week Mr. S. came under my care for gonorrhœal orchitis, he having been for some time under the care of a chemist, who treated him by depletory measures, but under which treatment he expressed him-

self getting much worse. The organ was enormously swelled, inflamed, and painful, for the acute stage had not yet passed off. I ordered him to bed, and without waiting for the acute symptoms to subside, enveloped the entire testes with strips of adhesive plaster, carefully applied, and as tight as could be well borne, support being also given by means of a suspensory bandage. I also administered internally the tincture of steel and quinine, with half a grain of morphia at night, and prescribed a liberal regimen. The following day, the strapping was quite loose, the swelling and pain considerably less; the patient had passed a good night (which previously had not been the case), and altogether expressed himself much better. I removed the plaster, and applied fresh. The next day the strapping was again quite loose, and the swelling and inflammation being both much reduced, I did not think it necessary to repeat it. The patient was able to get up and walk about. I then considered him cured of the orchitis; he was of course weak and debilitated from the previous depletory treatment he had undergone.

This plan (viz., that of compression) is certainly not the most humane way of treating orchitis, but it is decidedly the quickest and most effectual.—*E. Howard Moore, M.R.C.S., in London Lancet.*

[This mode of treating gonorrhœal orchitis was a favorite one with Dr. R. D. Mussey, at the Commercial Hospital of this city, many years ago.]

10. Seeing in the last number of *The Lancet* a letter from Mr. Moore on the treatment of orchitis by compression, and having myself lately adopted a very simple and, I think, entirely new plan of treatment with great success, I thought that perhaps you would be kind enough to give publication to the following case:

Mr. B—— came under my care for gonorrhœal orchitis, having been treated by a chemist in the first place for the gonorrhœa. The right testis was much swollen and very painful—in fact, in the acute stage of inflammation. I at once painted the whole of that side of the scrotum with a strong tincture of iodine, at the same time administering an aperient, and ordering rest, support being given to the testis by means of the ordinary suspensory bandage. I continued to apply the iodine every day, and by the fifth day he was quite well and able to resume his employment.

This is only one out of many cases, in most of which I have found, as above, that three or four applications were sufficient. The tincture that I always employ is a simple solution of iodine in spirits of wine, in the proportion of one drachm to three ounces.—*William Payne, M.R.C.S., in London Lancet.*

11. *On the Galvanic Cautery.*—Wires rendered incandescent by the continuous galvanic current can be employed for producing the effects of the actual cautery, whether we intend destroying the tissues or merely modifying their vitality. In certain cases the *galvanic cautery* has great advantages over other cauteries and the knife. It acts rapidly and energetically—it causes little or no hæmorrhage—there is no danger of its hurting the adjacent structures, neither on first intro-

ducing nor in afterwards removing it—it favors the growth of healthy granulations, and is not so terrible to the patient as the red-hot iron; and deeply-seated tissues which are inaccessible to the knife may, by the galvanic cautery, be burnt or cut without danger. After its use, the condition of the patient is almost always satisfactory, besides which the proceeding is scarcely painful. The drawback to the galvanic cautery is, that a special and somewhat expensive apparatus is required for its use, and that the wires, when rendered incandescent, may melt, especially if they come in contact with bones or cartileges. The galvanic cautery is chiefly applicable in the following conditions: Hæmorrhage from a large surface (as from fungus medularis), certain forms of neuralgia, ulcer of the collum uteri, cancer, fistula, severe stricture of the urethra, and polypus of the uterus, the larynx, and posterior nares. Professor Middeldorpffs's galvanic burner, porte-ligature, and seton, are the most convenient instruments for cauterization by means of galvanism.—*Med Times and Gazette*, 1862.

12. *On Rigors after Surgical Operations.*— Speaking of rigors, I wish I could provoke some one to their special study. What is the meaning of this shuddering, preceding, as it so often does, some of the most fearful maladies that we have to deal with? singular in its relation to the urethra, and to the formation of pus that has no free exit. I fear that we are as yet quite ignorant of its physiology; and I believe that we are too much in the habit of thinking that its essential or most significant element is the sensation of cold. But this is a mere sensation, and even only a subjective one; for, at least in agues, the temperature of the surface really rises before the rigor, and continues to rise all through its course. I venture to suggest (let it be my contribution to the study which I want to incite) that the best direction in which to study rigors is in their relations to convulsive disorders. My reason is, that they not only present all the essential features of convulsions, but may be replaced by them.

Three years ago I cut a gentleman for stone. Shortly after the operation he had a terrible rigor; and this was followed by great heat and sweating, and then by extensive suppuration in the cellular tissue over his chest. Again, some days after, another rigor occurred; and this was succeeded by a similar suppuration, and by other symptoms of pyæmia. Then some days later he had a severe epileptic seizure; and this was followed, in the same time and the same way as the rigors had been, by another suppuration. Then, after phlebitis and other mischiefs of pyæmia, he gradually recovered, and has had no cerebral disturbance since his recovery.

Recently, at St. Bartholomew's, a woman was under my care who had relapsing erysipelas. The earlier relapses were preceded by rigors of various severity. The last was preceded by a series of violent epileptiform convulsions; and these were followed by three days of complete coma, which seemed to be relieved when the erysipelas appeared. During the rest of her life she showed no sign of brain disease, and she died exhausted.

Again, this case had been told to me. A member of our profession had chronic pyæmia with repeated abscess-formations. In all the earlier part of his illness a rigor preceded each suppuration; in the latter part tetanic seizures took the place of the rigors.

I could cite other examples of this substitution of various convulsive affections for rigors; the occurrence of convulsions before eruptive fevers in young children, is probably one of them; but these may suffice for the suggestion that I made; and I am diverging too far from my subject, which was to indicate, by the evidence of rigors and other premonitory symptoms, that, however local they may be in their external manifestations, all the forms of erysipelas, pyæmia, of secondary gangrene, secondary phlebitis, and the allied diseases, are really general before they are local; that they are the issues of specific morbid conditions of the blood, and, therefore, to be studied and treated after the examples of those which are the types of the class; namely, the admitted eruptive fevers.—*James Paget, M.D., Surgeon to St. Bartholomew's Hospital, in British Medical Journal*, 1862.

13. *Fracture of the Lower Portion of the Radius.—By Wm. Henry Bowman, M.D., Editor Canada Lancet.*—Some time since, having a case of Colles' fracture in a girl of 16, she begged me to put it up with one splint, so that she could see her arm. To oblige her, I put on one in the manner recommended by Dr. J. Swinburne, of Albany, New York, which I slightly modified. Being much pleased with this mode, I have since adopted it in similar cases, and would recommend it for trial to all those who have not previously employed it.

It consists in confining the forearm on a slight splint, stretched along its posterior aspect, and held in position by means of adhesive plaster. I have found it most convenient to fasten the padded splint first to the hand, as nearly as possible, by long narrow straps, which should cover the end of the splint. I then make extension by pulling on the end at the elbow, the patient making counter-extension from his shoulder; and fasten the splint in this position by means of two strips of plaster, brought around and crossed on the forearm.

The circular straps may be put on afterwards.

The immediate relief from pain, and the free use allowed to the fingers by this mode, is surprising. But besides this, it does not interfere with the application of cooling lotions to the wrist. And the least deviation from perfect symmetry may be detected without deranging anything, and obviated by the application of a fresh strap. The length of the arm, too, from the elbow to the end of the little finger, can always readily be compared with the sound limb. I find, also, that a patient is better satisfied, when the arm is thus left exposed to view.

I generally apply a bandage loosely over the whole, allowing it to be removed at pleasure.

And take off the splint at the end of the fourth week in the young, and the fifth in older persons; substituting a woollen bandage around the wrist, and informing my patient that the "lump" will disappear in a month or two.

OBSTETRICAL.

14. *Phantom Tumor.—Reported by Kenneth Reid, Esq.*—Margaret D——, a healthy looking girl, æt. 16, native of Canada, was admitted by Dr. Hingston into the St. Bridget Ward of the Hotel-Dieu, on the 7th Dec., 1862. About a year previously, she first noticed a slight swelling in the epigastrium, which appeared after a fright,. and continued to increase for some weeks. She consulted a country practitioner of ability, under whose care the swelling would at times decrease, but the amendment was never permanent. For the past six months she had not been under medical treatment.

On admittance the swelling, now projecting over four inches from the normal abdominal parietes, occupied the position from the ensiform cartilage to the umbilicus. It was perfectly globular in form, about five inches in diameter; and so tense that no indentation could be made with the finger.

The Doctor, in remarking on the case, said that the swelling was peculiar, from its perfect resemblance to a tumor, but that its tympanitic clearness on percussion at once dispelled the illusion, and rendered its diagnosis easy; and that by the inhalation of an anæsthetic, the false tumor would be dissipated. He then proceeded to place the patient under chloroform, when the swelling completely disappeared, but returned with returning consciousness. The spine being next examined, a tenderness opposite the sixth and seventh dorsal vertebræ was discovered on percussion: over which region he directed the application of biniodide of mercury ointment,' giving two drops of croton oil internally. Next day the swelling was much reduced. The oil was repeated, and continued from time to time up to the 2d January, when she was discharged, seemingly quite well.—*Canada Lancet.*

15. *Funis Presentation—New Instrument.*—Dr. Robert K. Nuttall, of San Francisco, in the *Pacific Med. and Surg. Journal*, of January 3, 1853, writes as follows: "I desire to bring under the notice of the profession a very simple contrivance, made by me some years since, for returning the funis. I have employed it in a large number of cases, and with the most satisfactory results. The instrument is composed of pure gutta-percha, moulded whilst warm into the form of the annexed figure. The shaft is two feet long, compressed on the sides, and terminating in a forked extremity. In using the instrument the funis is placed into the fork (two fingers introduced into the vagina), and loop after loop carried up at the side the funis presents at. In many instances this is all that is requisite; in others, however, the funis comes down again during every succeeding pain. When this is the case, the two prongs are united over the funis by means of a piece of gutta-percha tubing, and the whole passed well up, and left *in situ*, to be expelled with the child. I may here observe that gutta-percha, such as is sold for splints, is of no use whatever. It will afford me much pleasure to show *the instrument* to any medical gentleman desir-

ous of seeing it. I feel well assured that this is a most valuable addition to the contents of the "obstetric bag," and will prove, in other hands, as it has in mine, the means of saving many children, and avoiding much unjust obloquy."

16. *Elongation of the Neck of the Uterus.*—Twelve months since the following rare case came under my charge (Prof. E. N. Chapman, M.D., Brooklyn, N.Y.):

A lady, married but never pregnant, who removed to this city, had been troubled for a long period with a train of symptoms, which, of a slight nature at first, had, gradually during the last five years, become so severe that frequently she was confined to her bed with the most intense suffering. She was of English birth, under the ordinary size, and, until her marriage, enjoyed good health, which at the present time, to a casual observer, would not have appeared much impaired; as her complexion was florid and her person plump and well developed. Yet for a long time, almost constantly, she had been under medical treatment for a list of liver, stomach and kidney disorders, which, arising as was thought, primarily, from marsh miasm, had settled, finally, into chronic hepatic and urinary derangements.

The medicines administered in accordance with this idea failed to afford any but temporary relief; yet, notwithstanding, an examination other than a general one was never instituted for the discovery of the hidden secret of her many complaints, although her sensations plainly indicated the uterus as the organ where they originated.

At all times she had the following symptoms: a sense of forcing and of pressure downwards in the pelvis, pain, and a feeling of dragging, extending from the back over the hips to the thighs, tenderness in the hypogastric and iliac regions, leucorrhœa, painful and difficult micturition; in a word, all those symptoms in a marked degree, which attend uterine disease, more especially procedentia uteri. After walking or any exertion, except of the gentlest nature, the above symptoms were always aggravated; if not increased to a severe attack, which we will now describe.

Once a month, in connection with her menses, either during, just before or after the flow, she would be seized with agonizing pains of a paroxysmal and expulsive character, that were attended with vomiting, neuralgia of the head, excessive irritability and hysterical spasms; an array of symptoms observed in the worst forms of dysmenorrhœa. To these, however, were added others not peculiar to uterine disease: dysuria, a scanty secretion of urine, loaded with mucus and depositing lithic acid on standing, pain down the course of the ureters, and a tender tympanitic state of the abdomen; which seemed to point to urinary calculi as the source of her sufferings.

I examined the patient at two periods: one when she experienced the greatest relief and felt comparatively well, the other during the height of an attack.

The first examination disclosed the following condition of the pelvic organs: the introitus vulvæ small and contracting spasmodically on touch; the uterus slightly larger than natural and prolapsed into the excavation, and the uterine neck elongated by an out-growth of about three inches in length, of its normal tissue apparently, though it was less firm and dense, which reached to the perinæum and encroached on the urethra. The uterus, being very movable was readily elevated to its natural position ; by which manipulation the feeling of dragging, tenesmus and bearing down, that constantly annoyed the patient was relieved, and we were allowed more accurately to observe the soft, flaccid condition of the hypertrophied neck.

On introducing a small speculum, as was done with some difficulty, this growth was identified as an elongated cervix uteri by the opening at its most dependent portion, that readily admitted the sound. This presented a natural appearance, except a flattening at its extremity, which previously was detected by the finger, as though it had been pressed for a long time against a flat, resisting surface.

The second examination made it evident that in addition to her symptoms at ordinary times, she, during an attack, had expulsive throes like those in labor, or more precisely, like those occasioned by a polypus of equal size distending the pelvis and pressing on the perinæum. The body of the uterus was not more than two inches within the external parts ; and its neck, doubled on itself, rested with its extremity on the perinæum, near the fourchette. The mass was forced down, so powerfully and persistently, as to fill completely the lower outlet of the pelvis ; and, had it not been for the spasmodic contractility of the sphincter vagina, the elongated neck would have appeared externally. It was now very difficult and painful to elevate the uterus, and when this was done, immediately, by an expulsive pain, it was forced down again.

The husband stated to me that for more than two years he had been circumscribed within the limits of Platonic love ; and that, from the closure of the passage, coitus was impracticable.

Thinking that were the uterus permanently supported on a higher level; the patient might possibly be freed in a measure from her annoying symptoms, I introduced a globe pessary on three different occasions, when she was in the least suffering ; yet, notwithstanding I used a small instrument and varied it each time, it failed to be retained, and in an hour or two came away with the expulsive pains. This form of pessary disappointing me, it was not thought worth while to resort to others ; since, evidently, these pains would be equally excited by any foreign body, whatever its shape, that was placed in the vagina.

The stem pessary, it is barely possible, might, from its not distending the vagina, have answered the purpose, but we did not wish to incur the hazard of uterine inflammation, which so frequently follows its use, and, therefore, proposed the excision of the neck of the uterus as the only means at our disposal for the relief of the patient. As in duty bound, the nature and danger of the operation, with what it might accomplish, was properly represented, so that a choice, knowingly, could be made between present ill health and the promise of restoration. The lady, however, concluded yet for a time to bear with her sufferings rather than *submit to the* knife.

Latterly, nothing has been attempted other than medical means.

With her, camphor has a marked effect in the paroxysms, both to relieve the constitutional symptoms and also the local ones, pain, tenesmus and forcing down. In dysmenorrhœa, threatened abortion, and for false labor pains or those following delivery, I have found the camphor very efficacious, ranking next to opium and even in some instances succeeding when the latter failed to give relief.—***Med. and Surg. Reporter.***

MATERIA MEDICA.

17. *Syrup of Carbonate of Iron.*—Mr. H. N. Draper gives (***Dublin Med. Press,*** Dec. 3, 1862,) the following formula for the preparation of this, which he considers a great improvement upon the usual form.

Carbonate of iron readily dissolves in simple syrup, and as the sugar exercises a completely conservative influence upon the salt, this is one of the best forms in which it can be exhibited: Protosulphate of iron, two ounces; carbonate of soda in crystals, two and a half ounces; water, two pints; sugar, four ounces.

Dissolve the sulphate of iron and half the sugar in one pint, and the carbonate of soda and the remainder of the sugar in the other pint of water, mix the solutions, allow the precipitate to subside, and decant the supernatant fluid. Then rapidly wash the precipitate by decantation, using for washing the whole of the following solution, but dividing it between two operations: Sugar, five ounces; water, twenty ounces. Next digest the washed precipitate in a sufficient quantity of sugar solution of like strength, agitating it repeatedly during some days. When it is all dissolved, add: Sugar, thirty-eight and a half ounces; water, nineteen fluid ounces. Boil to a specific gravity of 1.265 (at boiling point), and flavor with tincture of lemon or orange peel. This syrup contains about ten per cent. of carbonate of iron, is nearly colorless, and without unpleasant taste.

Dose.—One fluid drachm.—*Amer. Journ. Med. Sci., Jan.*, 1862.

18. *On Cimicifuga Racemosa.*—The tincture of cimicifuga, in doses of thirty minims three or four times in twenty-four hours, has proved a most valuable nervine and calmative in many cases of pseudo-rheumatism and obscure nervous pains. We are disposed to admit the correctness of the observations of the American physicians, who allege that it has a peculiar action on the uterus. In the irritable condition of that organ, often observed in patients for some time after menstruation has ceased, or irregular when about to cease, and marked by pain more or less periodical in the lumbar region, cimicifuga affords rapid relief. In neuralgic pains, often met with in such patients in other localities, it is equally beneficial. Females at the period of life we are speaking of frequently suffer from a distressing pain in the upper part of the head, recurring with greater severity at night. These cases are very satisfactorily met by this remedy. Pains in the mammæ also, whether referable to uterine disturbance or to pregnancy, are relieved by the cimicifuga very speedily. In lumbago it is almost a specific, as has been noticed by Dr. Simpson. A greater advantage of the tincture of the cimicifuga is, that it is not only rather

pleasant to the taste, but very agreeable to the stomach, rather improving the appetite than otherwise. Larger doses than thirty minims, however, as a drachm for instance, will in most persons produce an unpleasant tightness and dull pain across the forehead.—*Lancet, Aug.* 30, 1862, *p*. 238.

19. *American Tartar.*—At the last meeting, the following question was submitted to me, (W. J. M. Gordon, of Cincinnati, Ohio,) "What are the probabilities in favor of tartaric acid and tartar becoming commercial products of the Ohio Valley?" There has been no attention given to the deposit of tartar by the wine growers in the Ohio Valley up to the present time, although to judge of representations of those who have wine cellars, a large amount of tartar could be collected. I have determined, as soon as I can ascertain the average value of the tartar produced here, to offer to purchase all that I can obtain; by this means, no doubt, I shall soon arrive at a definite conclusion, and should it be thought worth while to continue this subject to me, I can at another meeting answer it with some certainty. With this you will find a letter I received from the President of the Wine Growers' Association, under date of April 12th, 1862, which contains some matter of interest.

"Mr. Wm. J. M. Gordon—Dear Sir: Your first communication on the subject of Cream Tartar produced in the Ohio Valley, addressed to me as the President of the 'American Wine Growers' Association,' was laid before the Association at the last meeting, and information elicited from the members present. They concurred in the reply that no attention has been paid by wine growers to the manufacture of tartar, or the collection of the crude tartar deposited in their casks.

"The customary mode has been, when changing wine from one cask to another, to clean the casks, and no care has been taken of the dregs, or what they considered the useless deposit of tartar in the casks.

"We cultivate in Hamilton county about 4,000 acres of grapes. The product of small vineyards are generally sold to dealers in wine the first year after pressing, consequently but a small quantity of tartaric acid would accumulate in the casks. The manufacturers of champagne wine use large quantities of one and two years' old wine, which is taken from the casks and put into bottles; of course this would prevent the accumulation of tartar. The only plan of calling the attention of the wine-grower to this subject is to have some authorized person to offer a certain price for the crude tartar, thus by showing the wine grower or wine dealer that some profit may be derived by saving the tartar and the refuse of his wine casks, they might then be induced to collect and save what is now considered useless.

"The principal wine growers in this county, and those who have large casks in their wine cellars, are: Longworth, Bogan, Yeatman, Werk, Moshier, Mottier, Duhme, Williamson, Hodge, and others, who might find it to their advantage to save the tartar of their casks, and thus establish a *nucleus for* enlarging the collection of larger quantities, until some one would be induced to manufacture the cream of tartar sold in the shops.

"I believe that this subject is worthy of the attention of the wine growers of the Ohio Valley, and that any mode proposed, by which the wine dealer could see a profit derived from his labor, in saving that which is now thrown away, that he would of course assist in promoting the manufacture of cream of tartar, thus releasing us from a dependence on the wine districts of Europe for this article of commerce.

"The destruction of the grapes of this region this season, by the mildew and rot, has discouraged our wine growers, and it is an unpropitious time to suggest experiments, or to undertake any expensive improvements connected with the cultivation of the grape.

"I am, very respectfully, etc., GEO. GRAHAM,
President of the American Wine Growers' Association."

—*From Proc. Am. Pharm. Assoc.*, 1862.

20. *On Cantharis.*—Several species of cantharis found in the United States, as C. vittata, C. atrata and C. cinerea, are known to be at least equally powerful with C. vesicatoria. It is even asserted that they are so much more powerful as to be dangerous, though this is doubtful, the fact probably being that they have been used in a fresher state than that in which the foreign article can be obtained, and, possibly, unskillfully exhibited.

The number of species of this and the allied genera Meloe, Mylabris, etc., distributed over our territory, is very great, but I have failed to find the author, excepting the late Doctor Harris, who has thought their habits and properties worthy of notice, and his observations were necessarily confined to the species of New England.

Audoin has left us (*Ann. des Scien. Nat.*, t. ix.) an invaluable history, commercial, therapeutic, anatomical and social, of the C. vesicatoria, but as yet we have no naturalist equal to the same labor of love for our native species.

Agassiz complains that our young naturalists study structure and classification to the exclusion of equally valuable branches, and warns them of the injury they are doing to science by it; and Emerson sneers, not without reason, at modern botany, as consisting wholly of Latin names; he might have said, bad Latin.

Since accepting the task assigned me, I have found my time too fully occupied with other matters, to make original observations of any value. In fact but one species, C. atrata, has come under my observation at all.

These may be found at this season in considerable numbers on the blossoms of the solidagos, or on the China asters, which they infest and destroy. From observations made on the species last summer, I should judge that the amatory process, so graphically described by Audoin, is generic; at least the initiatory performances, which were all I saw, were the same.

Commercially the subject is not worth consideration. On the prairies of Illinois I have often held four species in my hand at once, but all that I saw in the West would not amount to more than a few ounces weight, and, were they as plenty as mosquitoes, when harvest hands are paid two dollars a day, no collector could compete with the foreign article at present prices.—FRANKLIN C. HILL in *Proc. Am. Pharm. Assoc.*, 1862.

OPHTHALMOLOGY.

21. *Iridectomy.*—The operation of iridectomy has been too recently correctly described in this and other journals to make it necessary to repeat it. There are, however, one or two points connected with it, a further consideration of which may lessen the repugnance of the general practitioner to enter upon this portion of the field of surgery.

First, the instruments essential to its performance are to be found in the dressing case of every practitioner, viz., a lancet, a pair of forceps and scissors. The lancet should have a broad shoulder in order to effect a sufficiently wide opening without bringing its point too far forward in the anterior chamber for the safety of the cornea. It should not have been thinned by repeated sharpenings, and of course should be in perfect order. The forceps need not absolutely be very small, provided that they are *pointed*. The scissors, if large, must be first ascertained to cut with precision close to their points, and curved are preferable to straight scissors.

A thorough etherization of the patient is very desirable, as also that he should not be liable to vomit from a recent meal. If by the fingers of the operator, and of a clever assistant holding the lid, the globe is not rendered nearly immobile, a common tenaculum or hook passed through the conjunctiva and twisted half round answers very well as an ophthalmostat. With these instruments, if those to which I am accustomed are not accessible, I should not hesitate to operate.

The first step in the operation as described by some, suggests a difficulty and perplexity, even to one tolerably conversant with the minute anatomy of the eye. It is directed to enter the sclerotic a half line back of its anterior margin. Now all operations with which we have been familiar by sclerotonyxis (through the sclerotic) have been posterior to the iris, and it is necessary in this connection to bear in mind the fact that although the sclerotic appears to terminate where the iris commences, it does not, but advances front of the plane of the iris. It is intended to enter the anterior chamber and take hold of the iris on its anterior face. The initiative incision is, therefore, to be made in front of the iris, but as near to it as is practicable, and it is in fact made not through the sclerotic alone, but through the sclerotic and the cornea; through a portion of the sclerotic which overlaps the cornea, and a portion of the cornea which underlies the sclerotic.

The second step in the operation, the seizure of the iris by the forceps and pulling a portion of it out, does not involve a plunging of the forceps into the anterior chamber. With the evacuation of the aqueous humor, the iris has already fallen towards, and presents itself at and sometimes through the opening.

In the last step, *the cutting off* of the iris, it is important to remember that in glaucoma and other conditions for which it is necessary to lessen intraocular pressure, it is desirable to remove a considerable portion of the iris, and especially that nearest its outer circumference. The iris must be cut off as closely as possible to the globe.

On these points the *American Journal of Ophthalmology* gives' among other valuable hints, the following from Dr. Arlt:—"The iris must be cut off to its periphery, in order to give entire satisfaction. The section of the iris must at least comprise 2^{mm} of its substance, and for that purpose the outside wound of the cornea must have 6^{mm} to 8^{mm}, the inside one 3^{mm} to 4^{mm}. The iris hook (Tyrell's) is so dangerous for the capsules that its employment ought to be dispensed with. The cutting off of the iris after it is drawn out of the wound must be done *à deux temps;* the first half of the flap is cut, and then this part is drawn upward before the rest is snipped off. This method allows to cut up to the margin of the cornical wound."

Previous to the remarks here quoted, Dr. Arlt had expressed his preference for an initiative opening through the cornea only, near the sclerotic, instead of through the sclerotic. In cases in which the pupil is not much dilated, this may be allowable; and to an unpractised operator would certainly be convenient. But when, as in glaucoma, for the relief of which a general practitioner would oftenest find occasion to perform iridectomy, the pupil is largely dilated, sometimes to the extent of complete mydriasis, the readiest access to the iris, and especially its periphery, will be found to be at the overlapping of the sclerotic upon the cornea, in accordance with general usage.

Of the inestimable value of this means of relieving intraocular pressure, and of the imperative necessity in glaucoma of an early resort to it for the preservation of sight, a continued experience has convinced me, and I delay the report of several cases of interest, only to be assured of the permanence of the apparent result.—*J. H. Dix, M.D., in Boston Med. and Surg. Journal.*

22. *Atropia Paper.*—This paper is recommended by Mr. Streatfield (*Ophthalmic Hospital Review.*) as a portable and convenient substitute for the solution of atropia in ordinary use. It consists of green tissue paper, imbued with a solution of the sulphate of atropia, so that a piece one-fifth of an inch square is equal to or contains as much of the salt as a drop, or minim, of the solution of a strength in ordinary use, two grains to the ounce. The paper, soaked in the strong solution, is hung up to dry, and turned about while drying, that the atropia may be equally distributed. The little piece of the paper to be used, of the size above indicated, is taken up on the tip of the forefinger, previously damped; and the patient's lower lid being drawn down, he is told to look upwards, and the scrap of paper is put on the sclerotic conjunction below the cornea almost without the knowledge of the patient; the lid is then let go, and the piece of paper is left between the ocular and palpebral conjunction; a handkerchief is then tied over the eye, that the lids may be closed for a while.—*London Phar. Journ., Jan.,* 1863.

THE

CINCINNATI LANCET AND OBSERVER.

CONDUCTED BY

E. B. STEVENS, M.D., AND J. A. MURPHY, M.D.

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Original Communications.

ARTICLE I.

A Few Thoughts on Strangulated Hernia.

BY GEO. C. BLACKMAN, M.D.,

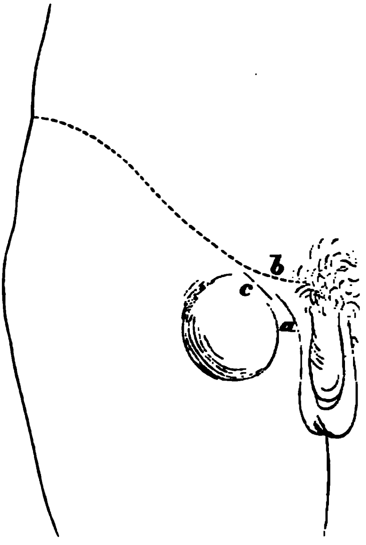
Professor of Surgery in the Medical College of Ohio, Surgeon to the St. John's, and Commercial Hospitals.

Dr. Sands, of New York, has published (in the *Amer. Med. Times*, March 28th,) the report of three cases of strangulated hernia in which the operation was performed without opening the sac, and states that his object in detailing these cases "is to bring before the notice of the profession an operation which, though well known in Europe, and almost exclusively practised by several English surgeons of eminence, has received little, if any, attention on the part of the profession in this country."

For the past fifteen years we have been accustomed to perform this operation *in suitable cases*, and in our edition of Mott's Velpeau (*Operative Surgery*), published in 1856, we thus wrote :

"We believe that it is generally conceded that one of the greatest improvements made in the operation, particularly for femoral hernia, is that recommended by Mr. Gay, in his work on femoral hernia. By making a very limited incision on one side of the neck of the tumor, the stricture may generally be divided without opening the sac ; the whole proceeding, according to this method, being little more than the taxis, with the addition of a superficial incision. The incision being made, Mr. Gay dissects through the superficial structures until the sharp inner edge of the falciform process is exposed ; under this a flat director is pushed, along which the hernia knife is carried, and the stricture divided, for a line or two, upwards and inwards. The reduction may then often be effected. Should any obstacle be encountered, the neck of the sac must be well drawn down and exposed, and any transverse bands situated upon it dissected through with the scalpel and forceps. Mr. Erichsen remarks that he has most generally found this necessary before reduction could be accomplished, and in our own practice we have occasionally observed the same necessity. By this simple procedure the dangers of the operation are greatly diminished. But if the tumor be of much magnitude, more incisions will be required. The propriety of operating without opening the sac has of late been much discussed by British surgeons. Among the warmest advocates of this practice is Mr. Luke, of the London Hospital, an institution where more cases of strangulated hernia are admitted than at any other in that metropolis. In the thirty-first volume of the *Medico-Chirurgical Transactions* Mr. Luke states that he has operated in eighty-four cases of hernia ; in twenty-five the sac was opened, but in fifty-nine it was unopened. Of the former eight died, whilst of the latter only eight died. Of seventy-seven operations reported by Sir Astley Cooper thirty-six proved fatal ; and according to the statistics of Dr. Turner, embracing five hundred and forty-five cases collected from various sources, two hundred and sixty died. Of thirty-one cases of femoral hernia operated on by Mr. Luke, in seven only was it necessary to open the sac. It is stated that even if the surgeon fail in completing the operation in consequence of adhesion or constriction of the sac, no harm can result, for the sac, after being exposed, may be opened in the ordinary way, and the stricture divided from within."—Vol. iii., pp. 903–5.

From the above it will be seen that seven years ago the operation without opening the sac had not wholly escaped attention on the part of the profession in this country ; and we may add, for the past eleven sessions of the Medical College of Ohio we have never failed to present this matter to our class in full detail,—and we think it would be difficult to find a graduate of that institution for the period above specified unacquainted with Gay's operation for femoral hernia.' The annexed diagram, from Mr. Gay's treatise, will explain his line of incision.



We have had considerable experience in this operation, and in many cases have been highly gratified with its results ; but we have had a few cases in which, like the old operation, it has failed, and that, too, where there were no adhesions to interfere with the reduction of the contents of the hernial sac into the cavity of the abdomen. A few weeks since we lost a female patient, about fifty-five years of age, who had been the subject of femoral hernia for some years, and the strangulation had existed for thirty hours at the time of the operation. The operation and reduction were performed with unusual facility, and although the patient was relieved for thirty-six hours, she died on the fifth day after the operation. No post-mortem could be obtained, and we could only infer that the peritoneal inflammation excited by the strangulation prior to the operation was sufficient, though temporarily relieved by the latter, to cause the death of the patient. On the other hand, we have at the present moment a case under our care in which the operation for femoral hernia was performed three weeks since ; and though the hernia (a recent one) was small, and the strangulation only of twelve hours' duration, so rapid had been the progress that several points presented a dark colored appearance, and after exposing the sac we at first hesitated about returning it unopened. This, however, was done, the intestine receding with a gurgling noise ; and although slight nausea and vomiting continued for twelve hours after the operation, the patient is now in a fair way of recovery.*

Our fatal case brought forcibly to mind the remarks of Mr. James, of Exeter, in his *Practical Observations on the Operations for Strangulated Hernia*, (London, 1859.) At page 33 he writes :

> " What are the causes of death after the operation ? In the great majority of cases peritonitis, often combined with enteritis, aggravated very frequently, if not produced, by a continuance of obstruction still existing within the abdomen, or by the abnormal condition of the hernia, even if wholly returned, still more if partially. The most frequent cause is that arising from the portion nipped by the stricture. As regards this peritonitis which is so often the cause of death in strangulated hernia, I may be allowed to observe that there are some material points of difference between it and ordinary peritonitis. The symptoms of the latter are generally clear and well marked from the beginning ; in this, on the contrary, while the symptoms of obstruction are clear and decided, those of peritoneal inflammation may not show themselves, if existing ; and it is difficult to say where they do or do not exist. . . . . . The operation may have been performed, the primary cause (without which recovery is rare) removed, but it can not be said that in all cases ' the effect surceaseth still ' ; on the contrary, the temporary relief which consists in the cessation of the pressing symptoms, arising merely from the constriction, is followed at no distant period by those of peritonitis, which in many instances had in reality *preceded* the operation, but was kept in abeyance, so to say, by the depressing influence of the strangulation (the latent peritonitis

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* This patient was much prostrated by previous ill health, and was a most unfavorable one for any operation. Her recovery has been in consequence more protracted than would have been the case in a more favorable subject.

of some authors). That having been removed, after a short interval the peritonitis developes itself, and the occurrence of the symptoms, then, leads to a wrong conclusion. It is often attributed to the operation, or the misapplication of remedies, albeit it existed before in a masked form."

The mortality following the operation for strangulated hernia is estimated at about fifty per cent., and yet in the practice of certain surgeons we find, as in lithotomy, or the ligature of arteries, individual instances of extraordinary success. For example, Mr. Pirrie, Professor of Surgery in the University of Aberdeen, states, in his *Principles and Practice of Surgery,* (second edition, 1860, p. 575,) that during a period of eight years he has performed the operation for strangulated hernia according to the usual mode (opening the sac) twenty-three times in all, and with success in every instance but one,—and in this, death occurred in consequence of an attack of phlegmonous erysipelas, which commenced after the patient was considered out of danger. He attributes his success to two things: avoiding all undue and useless handling, and performing the operation early. He has no doubt that the reason why the operation is so frequently followed by death, instead of being one of the most successful of the great operations of surgery, is, too great delay in resorting to the operation, and the undue and injurious use of the taxis, even after its adoption has proved unavailing.

In striking contrast with the above, we have the statistics of Mr. Gay, as published in the *London Med. Times and Gazette* for August, 1858. He reports twenty-two cases operated on by himself; eleven had the sac opened, and seven died. Mr. Ward, of the London Hospital, has reported (*London Lancet,* June, 1856) twenty-one cases of femoral hernia in which the sac was opened, and nine deaths. Mr. Luke has reported twenty-five cases (variety not stated) in which the sac was opened, and eight died. Mr. James, of Exeter, (*op. cit.,* pp. 42, 66,) has given us the result of his own operations in private and hospital practice; and of thirty-six cases there were fourteen deaths, the sac having been opened in all.

Compared with the results published by the advocates of the operation without opening the sac, the mortality seems truly alarming, and to justify the language of Mr. Erichsen in the last edition of his *Science and Art of Surgery,* (London, 1861, p. 917,) "that the ordinary operation, indeed, of opening the sac is an exceedingly fatal one is well known to all hospital surgeons, and is fully proved by surgical statistics." But if Mr. Erichsen had carefully noted in detail the circumstances connected with each of the cases reported—the influence of delay in resorting to the old operation, the peritoneal inflammation thus excited, and others which are independent of the operation, he would have been more guarded in charging to the *mode* of operation what is fairly due to circumstances unconnected with it. We need but quote those mentioned by Mr. Gay in his seven fatal cases: strangulation for twelve days prior to operation, contents highly inflamed; again, strangulation for ten days, appearances unfavorable; in another, omentum gangrenous, intestine nearly divided by stricture; sudden death from cardiac disease, while otherwise progressing favorably; abdominal hæmorrhage, resulting from the severe blow which gave rise to hernia, etc., etc. Indeed, Mr. Erichsen, at p. 963, *op. cit.*, has quoted from Mr. Luke to show that the experience of the London hospitals has clearly demonstrated the importance of early operation; viz., of sixty-nine cases where it was performed within the first forty-eight hours of strangulation, twelve died; while of thirty-eight operated on after that period, fifteen died. We have here sufficient evidence that the mere opening the sac is not the only, if it be even the chief cause that the ordinary operation is "an exceedingly fatal one."

One word in reference to the remark of Dr. Sands that the operation without opening the sac "is almost exclusively practised by several English surgeons of eminence." Dr. Sands will admit that the experience of Mr. Luke justifies us in placing him at the head of these English surgeons of eminence. Now Mr. Luke informs us that in femoral hernia, to which the operation without opening the sac is best adapted, in thirty-one cases he was compelled to open the sac in seven; and in twenty of inguinal hernia it was necessary to open the sac in thirteen instances. It is therefore an error to state that any surgeon of eminence, or of much experience, exclusively adopts the practice of leaving the sac unopened, for by so doing he must fail to relieve the strangulation, seated as it not unfrequently is in the neck of the sac. The testimony of Mr. Erichsen is, that Petit's operation is especially applicable to cases of femoral hernia, in which the stricture is outside the sac, but in inguinal hernia, he adds, it is not so easy to perform it, and, "indeed, in the majority of cases the surgeon will fail to remove the stricture in this way. This is owing to the constriction being usually seated in the neck of the sac, and is especially observable in congenital hernia" (p. 917.) While, therefore, we can not credit the statement of Dr. Sands in reference to the almost exclusive adoption of Petit's operation by any English surgeon of eminence, we do believe that, in cases really requiring operation, the surgeon in the majority of instances may relieve the strangulation without opening the sac, and for the very reason that strangulated femoral more frequently demands the operation than inguinal hernia.

Judging from our own experience for the past ten years, there are but few cases of strangulated inguinal hernia really requiring an operation. By means of chloroform and the prolonged but gentle taxis, aided by the elevation of the pelvis, etc., etc., we have successfully reduced many at first sight most unpromising cases, and for the past three years, in this form of hernia we have had no occasion to use the knife, whereas in as many months we have been compelled to operate in three cases of femoral hernia. Our earliest attempts, by persevering with the taxis for a much longer period than we had supposed to be prudent or safe, were forced upon us by the obstinate refusal of the patients to submit to the knife, nor have we seen in our own practice any unpleasant consequences following the prolonged taxis. We use the term "*prolonged* taxis," for in the case of reduction *en masse*, which formed the basis of our essay on this subject published in the *American Journal of Medical Sciences*, October, 1846, and re-written and published in the *N. Y. Journal of Medicine*, the hernial tumor was readily returned into the cavity of the abdomen. In our collection of cases of this accident published in the *N. Y. Journal of Medicine*, there were forty-six which followed the application of the taxis; and of twenty-six cases in which the circumstances connected with the reduction are recorded, thirteen are said to have been returned "easily," "quickly," "without difficulty," by the patient, while in fourteen it was only effected "after some attempts," "after many attempts," "with difficulty," and after the use of the warm bath and bleeding.

Mr. Luke, of the London Hospital, published a paper in the *Medico-Chirurgical Transactions*, vol. xxvi., in which he says "it is a circumstance worthy of remark, that the firmness of the adhesions of the parts in which it (the sac) is imbedded bears no proportion to the duration of the hernial protrusion, as might *a priori* be expected; for in all the cases related (his own), the hernia has been of some years continuance, yet in each was reduced without the employment of much force."

We have neither time nor space to dwell upon the mechanism of this accident, although it has a practical bearing on this question of the prolonged taxis. Suffice it to say that the cases reported by Mr. Luke, as well as those in our own more extensive collection, furnish but little support to the theory advanced by Mr. Birkett, of Guy's Hospital, in his paper published in the *Medico-Chirurgical Transac-*

tions, vol. xlii., where he maintains that in these instances of reduction *en masse*, the sac, instead of being pushed back entire, as has been generally supposed, with the contents strangulated at the mouth or neck (Fig. 1), is ruptured at the posterior part of the neck (Fig. 2), and through this rent the contents of the hernial sac are forced by the taxis, the patient thus perishing unrelieved. No doubt many cases have occurred where violence has been inflicted by the rude application of the taxis, but these can not be brought forward as an objection to that which is gentle and prolonged ; and the taxis must be proscribed altogether, if the surgeon is to be influenced by the occurrence of that rare accident, the reduction *en masse*.

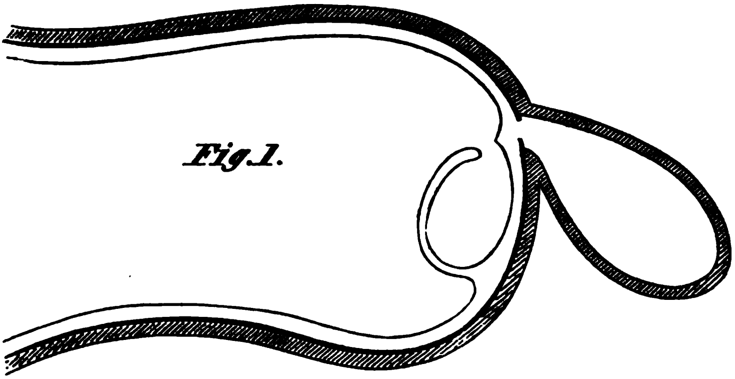
Fig. 1.

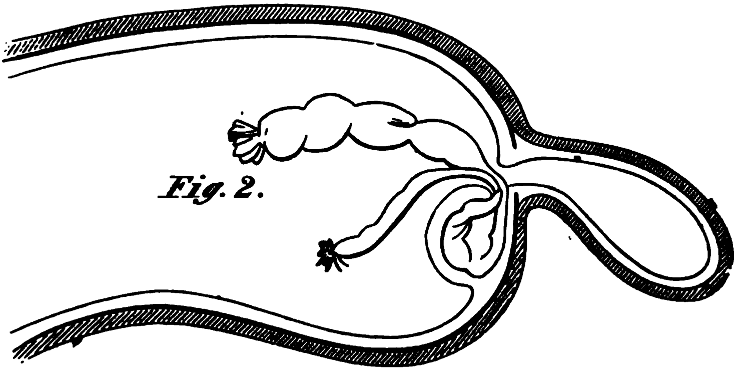
Fig. 2.

Mr. T. Wilkinson King published a paper in the third volume of *Guy's Hospital Reports*, in which he states that he has the unpublished records of above forty fatal cases of hernia, and that the main uniform fact which he would deduce from these relates to the extent and irreparable nature of the peritoneal inflammation. In eight cases the taxis was the cause of death; six proved fatal from rupture of the intestines; one died from peritonitis, and one from reduction in mass. These cases, as Mr. King justly observes, constitute a powerful argument against the employment of violent force in our efforts with the taxis. Mr. Bryant, in his analysis of one hundred and twenty-six fatal cases in Guy's Hospital, has reported fourteen cases where death followed the application of the taxis.—(*Guy's Hosp. Rep.*, 1856.) Still it may be stated as a general law, that death seldom follows the taxis when properly performed. Mr. Luke states that in two hundred and six cases in the London Hospital where the hernia was reduced by the taxis, not a single death followed. Similar testimony has been given by Mr. Ward, of the same hospital. Mr. James, of Exeter, (*op. cit.*, p. 13,) remarks that he has never known a death to occur when the taxis has succeeded, nor can he find a case to have occurred to any of his colleagues. He adds:

> "Desault's axiom is well known: Think favorably of a hernia which has not been handled before an operation. This, I submit, may be modified. *It is not because it has been handled, so much as because its not answering to the handling shows that it has made too great progress to be otherwise than dangerous.* Again, I may say, that however urgent the symptoms may have been, if the taxis has succeeded they have almost invariably subsided, and soon ceased."

He has no faith in the success of the taxis after the bowel has become "nipped and grooved," its tissues congested, or peritonitis in a greater or less degree already commenced—a condition very likely to lead to fatal results even after the division of the structure, whether by Petit's or the ordinary operation.

Favorable as has been our experience with the taxis, more particularly in inguinal hernia, we are not prepared fully to subscribe to the following statement of Prof. Gross, in his excellent *System of Surgery*, vol. ii., p. 611:

> "That such a measure (the operation), however, is often necessary I am unwilling to believe. On the contrary, I am satisfied from personal experience, that, with the aid of anæsthesia, proper attention to the patient's posture, and a thorough knowledge of the anatomy of hernia, almost every case will be promptly relieved by the taxis. For years past I have not been obliged to use the knife in a solitary instance, even where the strangulation had existed for three, four and five days, and where I had been requested by the attendant to bring my instruments for the purpose of operation. In most of these cases I have astonished the patient by the facility and promptness of the reduction, the absence of future suffering or inconvenience, and the rapidity of recovery."

One word in reference to the use of purgatives and enemas after the operation for strangulated hernia. Nothing is more common among modern authorities than to caution against every attempt to bring about an early evacuation of the bowels. To use the language of Prof. Gross, (*op. cit.*, p. 614,) "they should not be permitted to be moved for several days, but be kept in the most tranquil condition possible." Mr. Lane, in his recent edition of Samuel Cooper's *Surgical Dictionary*, vol. i., p. 972, remarks, that in the present day most surgeons abstain from administering aperient medicines, and allow the injured intestine as much repose as possible. In a few days, after all tenderness has subsided, and the bowels do not act spontaneously, he is in favor of gentle aperients or a simple enema. In the case to which we have referred where the operation was performed three weeks since, the patient, much enfeebled by disease prior to the strangulation and operation, was treated for some forty-eight hours on the plan recommended by Mr. Lane. But the tenderness of the abdomen did not subside until a large mass of indurated fæces were brought away by enemas and an aperient (citrate of magnesia.) While we would deprecate active purgation in cases where undoubted evidence existed of the continuance of severe peritoneal inflammation after the operation, we would suggest a careful examination of the patient, and an inquiry in reference to the nature of the ingesta prior to the occurrence of strangulation, lest the tenderness really due to indurated masses of fæcal matter should be mistaken for peritonitis.

But we must bring our hasty observations to a close, and will thus express our own convictions in reference to the operation for strangulated hernia. Bearing in mind the fact already mentioned that inguinal hernia may generally be reduced by the gentle and prolonged use of the taxis, aided by chloroform and position, I would not propose the operation until these measures had been fairly and faithfully tried for a longer period than has hitherto generally been regarded as justifiable.* Failing in the taxis, I would then attempt to ascertain by Mr. Luke's test (the point where impulse ceases,) the situation of the stricture, and by a limited incision over this, relieve it, if possible, by Petit's operation; and if this should not be practicable, would then open the sac, making as did Boyer a small incision just below its neck, and then dividing the stricture from within the sac. The twistings and adhesions contained within it may also be removed. We would avoid as far as possible the kind of operation described by a writer in the Edinburgh *Medical and Surgical Journal*, July, 1814:

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* Of course, even in inguinal hernia, in cases of acute strangulation, when the hernia is recent and the symptoms most violent, the tumor highly inflamed, and in which, as we have seen, the patient may die in twenty hours from the commencement of strangulation, it would be madness to waste time, and the operation should be performed at once. Such cases, however, do not constitute the majority of those which come under the surgeon's care. At least, such have not been the majority of those which have come within our own observation.

> "The surgeon divides the integuments by a wound several inches in length, and then proceeds by an incision of similar magnitude to lay open the sac. After the viscera, thus unhallowedly exposed to the pernicious stimulus of a medium unusual to them, (viz., the atmospheric air) have been felt, fingered, turned over, and examined *secundum artem*, the next step is to divide the stricture, which one might suppose to be the first object in view. The protruded bowels are at length reduced; but not until, in all probability, they have been brought into such contact with a number of irritating substances, such as sponges applied to the wound, the fingers of the surgeon, or, perhaps, even the sleeves of his coat. After all this, can it be wondered at if abdominal inflammation comes on so often and kills the patient?"

In femoral hernia, Mr. Bryant observes in his paper already quoted, (*Guy's Hospital Reports*, 1856) the operation is required 25·2 per cent. (we would say 75 per cent.) more frequently than in inguinal hernia, success in its reduction by the taxis being less frequent. This statement being corroborated by our own, as well as by general experience, we would, therefore, as a general rule, refrain from long handling, even though gentle, and if after twenty or thirty minutes we failed to reduce it, we would cut down upon the neck of the sac and divide the stricture external to the sac, making an incision into it only after the above method had failed. We would not regard these operations as rival methods, and while we do not believe a limited incision through the sac would materially add to the danger of the patient after the operation, we would avoid it as unnecessary in the majority of cases of strangulated femoral hernia.

ART. II.

The Doctrine of Thrombosis and Embolia.

[Part II. of a paper read before the Cincinnati Academy of Medicine.]

BY D. S. GANS, M.D., CINCINNATI.

PART II.—EMBOLIA.

General Pathology. — The idea of embolia and metastasis are often confounded in practice. They both differ from one another, like pyæmia and septicemia, according to the modern division, by embolia being a physical, mechanical act, brought about by bodies obstructing mechanically the blood-vessels, and pyæmia being produced by substances which become fastened in the narrower vessels, causing there inflammation and suppuration. Metastasis, on the contrary, consists in secondary local inflammation, caused by the chemical action of substances entering into the circulation from primary inflammatory or infectious parts or organs. Septicemia consists similarly in the reception in the blood of substances in process of decomposition, acting on the blood by their chemical property, decomposing and by their contact with the tissues causing inflammation and suppuration. In this way embolia and metastasis may theoretically be separated, but practically it is very frequently impossible to draw a line, as both exist often simultaneously. Septicemia may be caused by the ischorous disintegration of the embolia, and the embolia may be produced by the transportation of the corporeal contents of metastatic abscesses.

For the purpose of comprehending the production of the embolic process, it is necessary to observe that the venous current is capable of carrying along bodies of greater specific gravity than the blood itself, even through the heart to the lungs and other organs; and I take this occasion to observe that it is a striking circumstance that the mechanical contact of bodies with the inner lining of the heart (endocardium) causes, at least, if that contact is not too strong, no important phenomena. Now it is a fact that exudations and pathological vegetation on the inner membrane of the heart or of diseased vessels, etc., become detached in smaller or larger pieces, and are carried along the blood current to remote parts or organs. The same is the case, and much oftener, with the thrombi. When the blood coagulates in a vein, the coagulum does not advance only to the mouth of it, where this enters a larger branch or trunk, but generally reaches yet beyond this into the volume of the larger branch or trunk by continual deposition of new coagula, forming thus layer after layer; and in such a manner a "prolonged" coagulum is formed which lays close to the wall of the vessel at the side where the mouth of the smaller vein exists, and pointing toward the heart. This prolonged thrombus bears no longer any proportion to the original (autochthonus) thrombus from which it proceeded. The prolonged thrombus may have the thickness of a thumb, the original one that of a knitting needle.

These prolonged plugs, it is true, may enter into the described thrombus metamorphosis, and become organized, but this is very seldom the case. For while the obstructing plug enters into the metamorphosis and becomes organized into cellular tissue, it is not very seldom that the prolonged one enters into softening or crumbling.

During this state the prolonged thrombus is continually struck by the blood current which passes it, causing a continual breaking off of smaller or larger fragments, which are carried, as above mentioned, to distant parts. There are found, for instance, cases in which an obstructing clot from the crural vein reaches beyond the mouth of the profunda or saphena to the hypogastrica, without the profunda and the saphena becoming obstructed. The current coming out of these vessels flowing into the crural veins in a considerable angle, is obliged to continue its course between the wall and the coagulum which partially obstructs the vessel. This produces a peculiar spiral form of the thrombus. If this enters afterwards into organization, a spiral form of the vessel is produced; but if a side branch or one of two equal sized trunks is obstructed, the result is different. The clot becomes first irregular, uneven in shape, porous, and at last is wholly or in part loosened and carried along by the blood current, generally to the lungs.

In general, embolia in the venous system is produced by thrombosis, embolia in the arterial system more frequently by disease of the heart and vessels. For the purpose of becoming an embolus, a foreign body in the blood must be larger than the volume of the respective vessel, without being capable to pass beyond. From this results that the seat of venous embolia is very limited—namely, in the hepatic ramifications of the portal vein, for those originating in the latter; and in the ramification of the pulmonary artery, from those originating in the vena cavas and the right side of the heart. The arterial emboli are found almost in all parts of the system.

The embolia is exceedingly varying and very different in its consequences, according to the size of the obstructed vessel, the perfection of the obstruction, and the nature of the obstructing bodies. There happen embolia of the trunks, embolia of the branches and embolia of the capillaries, and already by this the effect must be a different one. For it is, of course, a very great difference if the abdominal aorta is obstructed or a capillary artery. But not less important is the degree of the obstruction. If the embolus is of that formation that a larger or smaller mass of blood may pass by it, a very small derangement or none may be observed, according to the importance of the organs; but the derangement may take place secondary, if the obturation becomes gradually complete by the formation of thrombi around the embolus. Of great importance again, if not of greater, is the accidental arrangement of the collateral vessels. If large collaterals branch off before the obturated place, the interruption to the circulation may be a mere passing one, and even at a complete obturation it may be restored in a short time. However, if the collateral arrangement is very imperfect, the obstruction, even a partial one, may be lasting and a gradual increasing secondary effect may occur. This explains the fact that the secondary effects are more lasting in smaller than in larger vessels; that, namely, in the brain, embolia of large trunks passes off generally more perfectly than that of the small branches. Thus it is explained that some organs, like the spleen, experience so very frequently embolic derangements, whilst others hardly ever show them, as the pancreas; although it is not probable that the plugs enter exclusively certain vessels. Nevertheless, it is true that certain arteries—for instance, the left iliac artery—are better adapted for the embolic process than others, offering a freer transit to such bodies, in consequence of their position and width.

Very different are the secondary effects, also, according to the nature of the obturating bodies. Every embolus produces locally a certain inflammation, but this may be almost imperceptible and limited to the wall of the vessel at the obstructed point, if the body or bodies are smooth and soft. But if the embolus is of a stronger irritating character, if it has particular mechanical or chemical properties which exert an unfavorable impression upon the neighboring parts, the inflammation will take a more deleterious course and may reach in extension and severity a high degree. Detached plugs from gangrenous parts may create metastatic gangrenous processes; those from diphtheric affections, diphtheric ones. The phenomena are here also very different, according to the size of the vessel. Whilst the obstruction of smaller branches produces at the worst metastatic deposits, in embolia of larger branches or trunks, extensive inflammation may take place.

Virchow divides the consequences of the embolia into functional (physiological) and material (anatomical) derangements; the first appearing as immediate consequences of the embolia principally of the trunks and larger branches; the latter rather more as secondary ones, principally of the embolia of the branches and finer ramification. But this division is not an absolute one.

Functional Derangements.—1. Sudden death, caused by asphyxia in consequence of obturation of the pulmonary artery; by apoplexy in consequence of embolia of the cerebral arteries; and by rupture of the heart in consequence of embolic softening of the muscular structure.

2. Apoplexia ischæmica in contradistinction from the apoplexia sanguinea. The first being in most cases caused by embolia of the arteria fossæ sylvia, vertebralis, corpora callosi, carotis cerebralis.

3. Acute mania.
4. Amaurosis.
5. Angina pectoris by embolia of the coronary arteries.
6. Asphyxia and dyspnœa by embolia of the pulmonary arteries.
7. Acute paraplegia, hyperæsthesia and rheumatoid affections of the extremities by embolia of the furnishing arteries.

Anatomical Derangements.—1. Necrosis (gangrene, mummification.)

2. Softening of the brain, heart and spleen.

3. Extensive inflammation of the mesenterium, lungs, eye and heart.

4. Hæmorrhagic deposits in the brain, eye, spleen, kidneys, probably of the lungs and stomach.

5. Gangrenous deposits in the lungs, brain, probably in skin, the spleen, etc.

6. Abscess of the liver, lungs, and probably in all other organs.

The localization of the embolia, the direction which the emboli take to different parts of the body, seems to depend in general—1. Upon the place where the primary clot is formed; 2. Upon its size, form and firmness; 3. Upon the angle in which the smaller vessel leaves the large one; 4. Upon the volume of the blood current. It seems that no district of the arterial current is absolutely free from embolia, and neither does any artery possess any particular attraction for the same kind of bodies. The embolia in the lungs localizes itself principally in the vessels of the lower tubes, and if these are already obstructed by former emboli or compressed by pleuritic exudations, hydrothorax, hydropericardium, scoliosis, etc., the emboli pass to the upper lobes. The right lung is more frequently the seat of embolia than the left. Plugs which have their origin in the left heart generally take their direction to the aorta thoracica, and especially to the splenic, renal and left iliac arteries, but seldom to the carotis, and exceptionally to the subclavia and brachialis.

SPECIAL PATHOLOGY AND THERAPY OF EMBOLIA.

Venous Embolia — Venous Emboli *in the hepatic ramification of the portal vein* are very seldom. They are the most frequently observed in the thrombosis of hæmorrhoids, in consequence of rectal operations, ulcerating cancer, disintegration of the coagula of an hæmorrhoidal varix; very seldom in consequence of thrombosis of other parts of the intestinal canal. The symptoms of the portal embolia are very various, being obscured by the symptoms of the accompanying disease. Sudden pain in the region of the liver, icterus and tumefaction of the liver, have been given as characteristic; but these are neither positive unless the origin of a thrombosis and embolia in the abdominal organ has been ascertained. In a sudden occlusion of the portal vein (produced in dogs) the following phenomena are constant: 1. Hæmorrhagies of the intestines and stomach; 2. Collapse and paleness of the parenchyma of the liver; 3. Diminution and cessation of the secretion of the bile, very likely also the production of sugar; 4. No deep nutritive derangements, no softening of the parenchyma and no necrosis of the serosa; 5. Absence of hyperæmia of the gall bladder and bloody bile.

As the total result from his experiments Dr. Cohn, of Breslau, makes the following important deductions: 1. The arteria hepatica is alone the nutritive vessel of the liver; 2. It (arteria hepatica) keeps up the normal structure, not only of the serosa, but also the hepatic lobes and hepatic cells; 3. As far as in these is seated the centre of the function of the liver, the formation of the bile, sugar, and blood corpuscles, the arteria hepatica controls, if only mediate, those functions; 4. The portal vein furnishes simply the material for the cell function; it stands in no immediate relation to the nutrition; atrophy not so much of the cellular tissue as of the secreting cells results from inactivity of the organ; 5. The function of the liver is depending, consequently, upon both vessels, the nutrition only upon the hepatic artery; 6. In gradual occlusion of the portal vein, the hepatic artery may act vicariously; 7. On the contrary, it is not probable that the venous blood of the portal vein can serve for the nutrition of the liver.

The emboli *in the ramification of the pulmonary artery* have their origin most frequently in the branches of the inferior vena cava, in a crural or uterine thrombosis, more seldom in the upper cava or in the right heart, right auricle or in affections of the tricuspidal valve. A crural thrombosis can cause an embolia only when it has taken place by a widening of the vein, retardation of the blood current or traumatic phlebitis, whilst in the compression-thrombosis no embolia can be produced even from a broken-up clot, as the compression would prevent the passage of the thrombus. This may become organized, or may be dissolved gradually in molecular masses, which do not affect further the system; or it (the thrombus) produces embolia, particularly in rapid disintegration, in consequence of a suppurative inflammation of the wall of the vein in cachectic individuals, or in consequence of external causes—as strong bodily exercise, mechanical contact of the examining physician, etc. The uterine thrombosis may also cause embolia of the pulmonary artery. This is the case particularly in the septic endometritis, by rapid disintegration of the thrombi, or some coagula pieces breaking off after childbed and carried to the lungs. It happens very seldom that this embolia proceeds from the upper cava, or from thrombosis after venesection.

In reference to its anatomical relation we have to distinguish embolia of small arterial branches, embolia of whole trunks, and embolia of the capillaries. In the first, momentary anæmia and collapse of that portion of the lung which is placed out of the circulation, takes place, with œdema of the surrounding parts, but it is soon compensated, or relieved by collateral hyperæmia. There does not succeed, therefore, any farther alteration of the parenchyma, no cough, short respiration, pain or fever. In the second, the tissue suffers also rarely in its nutrition, the bronchial arteries connecting with those capillaries becoming enlarged and forming a perfect vicarious circulation. In the third—namely, embolia strictly of the capillaries—a restoration of the circulation is impossible. It extends either over all the capillaries of a district, or a portion of it remains open for the circulation: in the first case, the blood in the respective pulmonary artery enters into absolute stasis, the respective bronchial arteries become hyperæmic or may burst; in the second case, the open capillaries become the seat of hyperæmia, extravasation and inflammatory exudations.

The conservative phenomena of these anatomical disturbances either depend upon the morbid condition of the parenchyma, or secondary, upon the stasis of the blood, and the lessened oxidation of the same; but they present themselves plainly only in the occlusion of an entire trunk or numerous smaller arteries. Local morbid conditions are—collapse and vicarious emphysema, sometimes lessened pectoral fremitus, immobility of the thorax, suspended respiration, high position of the diaphragm, seldom hydrothorax, however. The capillar embolia is too unimportant as to cause any great disturbances, except slight pleuritic irritation and perhaps light hæmoptysis. More important are the symptoms of the insufficient oxidation of the blood, consisting in a constant craving for air, decrease of the temperature in general, (until the entrance of reactive pneumonia and febrile excitement) and the formation of unoxidized substances in the blood, with secondary separation of urates in the urine. The symptoms of the stasis of the venous blood present themselves principally in sudden local occlusion of a large trunk, as diastatic dilation of the heart, venous hyperæmia of the liver and kidneys, cyanosis of the face and extremities, sometimes œdema. The hepatic hyperæmia continues also, and produces the nutmeg liver, the exit of the portal blood remaining unweakened; the other symptoms of the venous congestion soon pass off, in proportion as less blood passes out of the lungs, and becoming placed in the background by the symptoms of the anæmia and hydræmia. Sudden death (in extensive thrombosis of numerous branches, produced principally by air and injected substances) takes place with light opisthotonus, arrest of the heart's action, widening of the pupil, retardation and finally cessation of the respiration, and other symptoms of irritation of the nervus vagus, oculomotorius, sympatheticus and the central nervous system generally.

For the *diagnosis* of the embolia of the pulmonary artery, the great dyspnœa, the craving for air, is of particular importance, although the patient is able to breathe deep, and although the physical examination of the chest does not reveal anything abnormal, and the individual is not anæmic. The diagnosis is assisted by the discovery of the course of the embolia, by the proof of the embolic act itself, (decrease or sudden disappearance of the thrombus and the advent of a chill,) and by the appearance of functional derangement in the lungs and organs in immediate connection with them, which may be explained by embolic process. A differential diagnosis may cause occasionally difficulties, particularly asthmatic attacks, intermittents, Bright's disease; and in sudden death the diagnosis is almost entirely impossible.

The tasks of the therapy are: To lead the embolus to its solution, or, better yet, to its higher organization to inoffensive connective tissue; to reëstablish the collateral circulation as perfect as possible; to relieve the secondary disturbances of the blood stasis or prevented oxidation, and to prevent a repetition of like attacks. We possess, it is true, solving remedies for the fibrin as well as for the blood corpuscles, (ammonium, saltpetre,) but these might not be introduced into the system in the necessary quantity without harm; a simple loosening or breaking up of the thrombus might lead to new embolia (as it happens in marantic conditions); the organization of the embolus ought to be favored by a tonic treatment. The collateral circulation, which is so often disturbed by hyperæmia so as to cause occasionally hæmorrhages and inflammatory effusions, might incline to bloodletting, but the quickest possible formation of a substituting collateral circulation is only possible in a strong constitution, hence a tonic treatment is equally in its place. Only in high plethora, where we have to fear œdema of the lungs and inflammatory infarction, and where the sudden obstruction of a larger pulmonary vessel causes enormous fullness of the right ventricle, threatening paralysis of the heart, a large venesection is the only remedy. The insufficient oxidation of the blood is best remedied by a tonic treatment, and the repetition of the similar attacks prevented by absolute rest, digitalis and opium.

2. The arterial embolia is, as already said, more manifold than the venous, and it differs from the latter principally in hardly ever being caused by thrombus formation, but almost always by diseases of the heart and of the inner coat of the vessels. This is explained by the absence of valves in the arteries; the greater immunity of the latter against traumatic influences; the more rapid circulation in the same, and the rare occurrence of arteritis in comparison to phlebitis, as also by the frequent atheromatous and bony deposits on the inner wall of arteries and the frequent diseases of the endocardium and the valvular apparatus of the left heart. The consequences of embolia in an artery depend upon the size of the embolus, and upon the size and number of the communicating collateral arteries. First, anæmia takes place in the district of the obstructed artery, which may become equalized again by sufficient influx from collateral branches. If not, mortification, mummification of the tissues in consequence of suspended nutrition, soon takes place, and often the consequences of the collateral hyperæmia present themselves—serous or plastic exudations—or sanguinary effusions.

Embolia of the Splenic Artery is most frequently observed. It happens usually as partial, erroneously so-called metastatic splenitis, by entrance of exudations in endocarditis, or by bony particles, valvular vegetations and coagula of fibrin having become detached. Total obstruction of the splenic artery has been observed exceptionally (Oppolzer). The partial infarctus has generally the form of a wedge, with the base toward the periphery of the spleen, corresponding to the shape and divisions of the splenic vessels. The embolus soon becomes pale yellow and enters in part into resorption through fatty metamorphosis and molecular disintegration, whilst another part becomes organized into constringent cicatricious tissue or to ostoid substance, causing a caving in of the atrophied splenic tissue.

A diagnosis of a splenic infarctus in most cases is not possible, and can only be made with some probability when tumefaction of the spleen and sudden pain in the region of the same, with the physical signs of diseases of the heart or blood-vessels at the same time are observed.

Embolia of the Renal Arteries has been observed almost as frequently as that of the splenic, and present the same conditional circumstances, and local alterations; but the functional derangements are clearer, facilitating the diagnosis. It is seldom that the trunk of the artery is obstructed. The secretion in that case ceases in the affected kidney, but its nutrition is carried on by the arteries of the capsule, and its function is assumed by the other kidney, so that the urine remains entirely normal; the diagnosis becoming, therefore, impossible. But mostly smaller branches of the renal artery only are obstructed, and then, hæmaturia happens frequently, and that suddenly; and albuminuria is constant. These symptoms, combined with the physical signs of diseases of the heart or vessels, make it very probable that embolia of the kidney is existing. In endocarditis, embolia of the spleen and kidney occur often simultaneously, whilst none is found in other organs; probably because the finely divided exudation matter of the endocarditis entering the blood will be easier arrested in the peculiarly divided splenic and renal vessels than in others; but there is no reason on that account to consider these infarcti as metastatic or as rheumatic splenitis or nephritis. The diagnosis is considerably facilitated by the almost always simultaneous presence of splenic and renal embolia, deducting from this fact upon the existence of a latent form of endocarditis or atheroma.

It is proper to mention here the pigment embolia which is observed during malignant intermittent fevers. The pigment formation proceeds either very rapid, so that already after a few severe fever paroxysms, with delirium, convulsions, and even maniacalic symptoms, death takes place with stertor and coma by apoplexia miliaria; or the intermittent existed already a longer time, leading only later under the same symptoms to death; or the process is a chronic one, with or without visible functional derangement of different organs. The pigment is formed, according to the results of post-mortem examinations, in the spleen, is carried from there into the hepatic ramifications of the portal vein, where the larger pigment clots are arrested, whilst the smaller granules are carried through the pulmonary capiliaries into the arterial system, and scattered to all parts of the system; but there are found occasionally, principally in the brain, such large pigment clots, that it appears impossible for them to have passed both capillary systems of the liver and lungs, and the supposition is that they must have been produced in the blood itself. The deposition of the pigment characterizes itself principally in the cutaneous capillaries by the ash pale color of the skin; it is frequently found also in the brain, more seldom in the spinal marrow, where it causes passing paraphlegia, or if extensive hæmorrhage or atrophy occurred, paralysis and lasting muscular contractions. In the liver, the pigment clots produce at first an enlargement in consequence of reactive or passive hyperæmia and exudation ; later the liver becomes atrophied by the atrophy of new formed connective tissue or by fatty disintegration and resorption of the hepatic cells. In the intestinal mucous membrane a pigment formation of a slate color is also occasionally observed, which is probably the cause of the dysenteric processes in many severe intermittent fevers. In all these organs the diagnosis of the pigment embolia always remains doubtful, whilst in the kidneys it may be diagnosticated not only during the sickness by the examination of the urine, but even after years.

The *Embolia of the Arteries of the Extremities*, particularly in the cruralis, is frequently observed. A plug carried from the heart or aorta is arrested, according to its size, already in the trunk of the crural artery, mostly under Poupart's ligament or in the profunda fem., or in the arteria tibialis postica. In the first case an immediate stasis of the blood current, with cessation of the nutrition of the lower extremity, takes place on account of the smallness of the collateral anastamosis. The symptoms are immediate paralysis, gradual coldness of the leg and the sensation of ergotism, and soon violent pain, whilst the susceptibility of the skin against external impressions diminishes more and more. The extremity now becomes colder and colder, livid, gangrenous, and dries up, as in senile gangrene, only more rapidly, from the toes to the place where in the mean time a collateral circulation has become established ; and only when on account of deficient pressure from the arteries thrombi have been formed also in the crural veins, humid gangrene instead of mummification will take place.

The principal symptom for the diagnosis is the *absence of the pulse* in the crural artery and its branches. The pulse is, to be sure, wanting also in total thrombosis of the artery, but this can then be felt as a hard, thick chord all along down, whilst the embolus, enlarged by secondary depositions, can be felt occasionally under Poupart's ligament, disappearing more downwards. The pulse is also wanting in ossification of the arteries, but it is locally so limited. The absence of the pulse is also present in the congenital, but very rare, atresia of the aorta, but a rushing noise, a pulsation, is felt in the smaller collateral arteries which re-establish the circulation. Finally, it is also present in the acquired occlusion of the aorta in which gangrene of *both* legs are observed.

The second symptom for the *diagnosis*, the *sudden paralysis of one extremity*, can neither be confounded with a spinal paralysis (this affecting both legs), nor with a cerebral paralysis (this not presenting itself so suddenly and not being associated with want of pulse). It is impossible, in the further course of the affection in the beginning gangrene, to mistake it for any other morbid condition. The result is generally fatal on account of the extensive mortification of the tissues with symptoms of exhaustion and pyæmia. A recovery by the formation of a line of demarcation, and sloughing off of the gangrenous parts in consequence of the establishment of a collateral circulation, is very seldom.

In the embolia of the arteries of the upper extremity exactly the same symptoms present themselves.

The treatment is very limited, not being able to favor the formation of a collateral circulation, nor to remove the embolia, nor to prevent gangrene; only the violent pain may be lessened partly by application of cold water, and in case of the appearance of a line of demarcation, amputation may become indicated.

Embolia of the Cerebral Arteries.—This embolia has been observed quite frequently for the last few years. The plugs may find their way into the brain as well through both carotis as through the vertebral artery, and they will be arrested, according to their size, either in the arteria basilaris or carotis cerebri, or first in the circulus art. Willisii, or they reach the arteria corpus callosi profunda cerebri or fossæ sylvii. The embolia of the carotis cerebralis or interna produces but passing paralysis of the opposite side of the face or body, no essential material anatomical derangements of the corresponding cerebral parenchyma.* At the utmost, the first stage of red softening, tumefaction and loosening of the cerebral fibre takes place with secondary hyperæmia, which recedes soon, proceeding only exceptionally into perfect softening. The symptoms of this and of the cerebral embolia are similar to those of apoplexy, as sudden loss of consciousness and hemiplegia resulting; but absolute paralytic phenomena take place here without symptoms of irritation. The face remains anæmic, collapses, the impulse of the heart is weak and small, the respiration quite superficial; the pupil mostly unchanged; the paralysis in the beginning incomplete, afterwards progressing slowly and steadily to a certain extent; contraction of the extremities are not existing.

Observations and experiments about embolia of the arteria fossæ sylvii have shown that wherever the embolia passes beyond the circulus art. Willisii, softening of the brain is a sure consequence. According to Dr. Cohn, the softening is nothing else but necrosis, a breaking down of the cerebral elements, and is produced by everything that diminishes the nutrition of the brain, loosening the delicate connections of its fibres, and partly by deficient or suspended blood current, or transudations and exudations. Inflammation or hyperæmia within the softening, he says, is never present; injected fluids penetrate but to the outer limits of the same, and the vessels of the softened parts are under the microscope indistinct, filled only here and there with fat drops or with amorpheus gray substance; the stronger the collateral circulation, the smaller the softening. The rosy coloring of the first stage of softening depends upon impregnation of the parenchyma by effused coloring matter of the blood, and yellow softening exists either simultaneously in places where the pigment is more divided, or goes out of the red one (second stage) through metamorphosis of the pigment. Pus and fat, which were formerly considered as the cause of the yellow softening, are but very seldom found.

The *symptoms* of embolia of the cerebral arteries are: 1. Paralyzation of the motor centres; mental and sensitive derangements are entirely wanting, or are but passing. 2. The place of the localization being usually found within the great marrow deposits, principally within the corpora striatæ, the nerves of the extremities and the facialis of the opposite side. 3. The paralytic symptoms present themselves constantly without preceding contractions or spasms, and become relieved in the same degree as the collateral circulation becomes more effective, *seldom do they increase*. 4. The intact brain not suffering by venous hyperæmia and compression as in apoplexy, no vomiting, no grinding of the teeth, no diminution of the pulse nor stertor take place, but principally no *alteration of the pupils*. 5. The paralytic symptoms improve in the farther progress, and only paralysis of the extensors remains, or they remain *in statu quo* or increase some little, but never is the *extent of the derangement larger than corresponds to the extent of the obstructed artery*. If death does not take place immediately after the embolia, it never does so in the later stages of the progress. 6. Facial anæmia and diminished temperature of the body are almost constantly observed, but never increased pulsation of the carotis of the affected side.

The *diagnosis* of an embolic softening of the brain is facilitated by the following: 1. Valvular disease of the left ventricle in consequence of a lately passed or yet existing endocarditis; 2. The usual youthful age of the patient; 3. Wanting atherosis of the radial artery (atheroma of the cerebral arteries producing similar symptoms); 4. Sudden hemiplegia without prodromi, with or without want of consciousness, without the above mentioned symptoms of irritation, if after a few hours consciousness returns and the paralytic symptoms become less, and if finally embolic phenomena in other parts of the body, tumefac-

the spleen, hæmaturia, or gangrene of the extremities present
lves.

Cohn considers a cure possible as new elements form themselves
e of the softened one. To favor this healing process it would
ssary to pursue, according to Traube, a tonic, stimulating in-
f the usual energetic antiphlogistic treatment, for the purpose
oring a vicarious collateral circulation by increasing the blood
e. But as already hæmorrhages occur by the collateral hyper-
and the necessary support to the vessels at the borders of the
g gets lost by the loosening of the parenchyma; as further-
e collateral circulation is not taking place in hours or days, but
weeks or months, and as finally the embolia is usually pro-
by an increased action of the heart in diseases of the same,
nts have certainly to be used with great caution. Only in gen-
æmia and cachexia, in stenosis of the ostium venosum, where
ion of the heart threatens to become paralyzed; in atherosis
vessel, in absence of fever, and in cases in which the condition,
short improvement, becomes worse again in consequence of a
t collateral circulation, the stimulant method might become
ed, whilst in plethoric strong young individuals with hyper-
of the left ventricle and valvular affection of the aorta, with
is, constant headache, facial turgor, with symptoms of capillary
y, dizziness and incomplete paresis, even venesection and prin-
a derivative drastic treatment would be indicated.

olia of the Arteries of the Eye.—Suppuration of the eye and
sis have been observed with pyæmic, principally puerpural
es and diseases of the heart. Meckel and Arlt showed that the
natory process commences in the choroidea, passing only secon-
the other parts of the eye. But only Virchow demonstrated
is affection depended upon an embolia of the arteries of the
ich proceeded from the pyæmic endocarditis. He produced
nbolia experimentally, and soon after observed it in a woman
ve years old, who had died of disease of the heart. Afterwards
liagnosticated an embolia of the retinal vessels in a patient suf-
f a stenosis of the ostium venosum, and effected a temporary
ement of the acute amaurosis by paracenthesis of the eye and
my, by which the circulation became restored, the empty retinal
became more filled with blood.

hese are the principal arteries and organs in which embolia has
served. Of others the observations are yet too meagre as to

treat of them here. . . . I had intended to illustrate the various thrombosis and embolia by cases reported in different journals, but as this essay has passed already the limits which is suitable for a paper of this kind, I refrain from doing so, hoping that this incomplete exposition of this doctrine will stimulate others to pursue this subject to its fullest extent.

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ARTICLE III.

Animal Heat, Clothing: Their Importance in Preventing the Formation of the Tubercular Diathesis and other Disorders.

BY A. P. DUTCHER, M.D., OF ENON VALLEY, LAWRENCE CO., PENN.

I.—Man Naturally Destitute of Covering.

There is no being that comes into the world so naked of all covering, so destitute of natural protection, so exposed to injuries and suffering of temperature as man. Some short-sighted, splenetic men have found fault with our Creator for this. But we can discover no reason for fault-finding or grumbling. Where is the man that appreciates his exalted position in the scale of being, who would exchange his beautiful skin for the hide of a beast, or the feathers of a bird? Could any man that sees, feels or reasons, desire to have the physiognomy of a horse, or a lion, instead of the human face divine, instead of its lovely complexion, its eloquent features, its attractive delicacy, and its impressive dignity ? But, independent of all beauty and all that delights the eye, the taste and the touch, in the human skin, who would relinquish the mental advantages which we derive from its exquisite nervous sensibility ? We could not have a large portion of our sensations and ideas without it. In the delicate sensibility of the ends and inside of our fingers and our palm, which provides us with an important part of our most useful knowledge. The connection is unceasing between the mind and the skin. A fine nervous expansion, proceeding from the brain, is purposely spread over the outside of the body, immediately under the last cuticle. That our intellect may have the benefit of this universal sensibility, it is materially associated with our moral feelings and with our best sympathies.

Although man comes into the world so naked, so destitute of natural covering, yet nature has placed means within his reach, whereby he may hide his nakedness, and shield his body from external injuries and the extremes of heat and cold. As man was designed to inhabit every clime, from the ice-bound regions of the extreme North to the burning sands of the South, his body is so constituted that by incasing it in furs, and living exclusively upon an animal diet, he can endure the most extreme reduction in the temperature of the atmosphere, and live in the enjoyment of perfect health, while by throwing aside his furs and animal food, and clothing himself with the flimsiest garments, and living upon vegetable diet, he can enjoy equal health, under the scorching sun of the torrid zone. In our latitude we have annually extremes of heat and cold, requiring frequent changes in our garments, to suit the varying changes in the temperature of the atmosphere. By very many accurate experiments it has been conclusively demonstrated, that the temperature of the adult human body is 98°, while that of the infant is 93° or 95°. It has also been shown that it is much more difficult to sustain the normal standard of heat in infants than adults, and that they perish much sooner from the effects of cold, and it is an appalling fact that more children die from diseases produced by cold than from any other cause. The mortality among children would be greatly lessened, if more attention was paid to their dress. Its philosophy is little understood by parents, and much less attended to by the physician.

II.—How the Heat of the Body is Maintained.

But how can we maintain the normal standard of heat in the system? The principles of natural philosophy involved in the solution of this question are exceedingly simple. Let us take a brief glance at them. One of the most common properties of heat is its tendency to diffuse itself through space, or through every body with which it comes in contact. When any body is heated, that is, when a large quantity of caloric has been introduced into it, the caloric has a tendency to pass off into other bodies that may be near it; and this diffusion of the heat goes on until all the bodies that are in the range of its influence come to the same temperature. There are two ways in which caloric may pass from heated matter. It may fly off as light does, in rays passing through the air; until it meets with some substance which absorbs it, or it may pass away from the heated body along any substance placed directly in contact with it.

The first of these is called *radiation*, the second is *conduction* of caloric. Thus when we light a fire in a room the apartment becomes warm, because rays of heat pass into it by radiation; and if we put the point of the poker into the fire and keep it there, by and by the handle of the poker becomes hot, because heat has passed along the handle by conduction. But heat is not passed or conducted along all substances with equal rapidity. Some substances conduct it very rapidly, others very slowly; and in proportion as they do so, they are termed good or bad conductors of caloric. Thus it is quite obvious that if a heated body be surrounded by a bad conductor of heat, it will part with its caloric much slower than it would do if surrounded by a good conductor.

Now it is precisely on this principle that we proceed in the selection of materials for clothing. The heat of the human body, as just stated, is 98°, but as the temperature of the air in temperate, and still more in cold, climates is much lower than this, it is evident that in accordance with the laws of the diffusion of caloric, the heat of our bodies must have a constant tendency to pass off into the surrounding atmosphere. In order, therefore, to prevent the cooling of the surface which would thus ensue, we surround our bodies with substances which are bad conductors, and which consequently prevent our animal heat from passing away from us.

The materials of which clothing is made are chiefly wool, silk, hair, down, cotton and linen. Of these, wool, from its being a very imperfect conductor of heat, and being at the same time an abundant commodity, is mostly employed to retain the natural heat of our bodies—that is, for warm clothing. Raw silk, raw cotton and hair are as bad conductors as wool, and would therefore be equally warm; but silk and cotton are only used in clothing when woven, and they do not retain the heat so readily, for the manner of manufacture has an important effect in modifying the conducting power of the substance; generally the looser the texture the better it will maintain the heat of the body; because it only acts in virtue of its non-conducting power, but being in this loose state, it retains among its particles a quantity of warm air in contact with the surface of our bodies.

III.—The Importance of Retaining the Heat of the Body.

The importance of maintaining the natural heat of the human body will be readily seen if we consider for a moment the effect of cold upon it. Whenever a portion of the body parts with its caloric; when, in short, it becomes cooled in any way, the blood-vessels of the part become constricted, the blood, of course, is prevented from circulating freely through them. Now a very large portion of blood in the normal condition of the body circulates through the skin, and it is clear that if the vessels of the parts become constricted, the blood must pass into it in small quantities, and will therefore be obliged to find its way in undue proportions into other parts. Hence when the surface becomes chilled, we have morbid effects produced in internal organs, just because the blood is, as it were, forced into them in improper quantity, from not being allowed to circulate freely in the superficial part of the body. Hence arise inflammation, catarrhs, sore throat and bowel complaints, which, in the changeable weather of spring and autumn, so frequently require the aid of the physician. The proper preventive of all this is to surround the body with a good non-conductor, which will retain the animal heat and prevent it from passing off into the surrounding atmosphere.

IV.—Things to be Considered in Selecting the Dress of Children.

In selecting clothing for children there are three things worthy of special attention, namely, *warmth, simplicity and ease.* In our climate there is no material more appropriate for the clothing of children than flannel. This has been our conviction for many years, and we are in the habit of recommending our patients to provide such clothing for their infants. As soon as a child enters the world, and its body has been thoroughly cleansed by frequent ablutions, and the surface carefully dried with a soft napkin, and the umbilic cord properly dressed, we would secure it by a band of thin flannel, five or six inches broad, and long enough to go twice round the body. Great care should be taken not to bind it too tightly, for if this be done it will be a source of much trouble both to the child and the mother. Not very long since, I was called to see an infant some ten days old, who was very troublesome, crying almost incessantly night and day, disturbing the whole household. On examination, a *rupture* was found in each groin, and a little further examination discovered the cause, which was the band, so tightly, almost, as the strength of the nurse would allow. The case was remedied by loosening the band. Many nurses will persist in applying it very tightly, although ordered to the contrary. They imagine that the band serves to keep the child from falling to pieces, and therefore the tighter it is applied the better. We should give special directions in this particular, and see that they are not disregarded. We may thus prevent a great deal of mischief and future suffering.

Next comes the shirt, and this we think should, in the cold season of the year, also be flannel. Some, we know, have objected to it, because they say it is more apt to irritate the delicate skin of an infant and unless it be changed every day, as the inner garment of an infant ought always to be, it is much less cleanly. But we see no force in these objections. If the flannel is fine, and the shirt nicely adjusted, what little irritation that it may produce on the skin will be rather advantageous, in exciting the cutaneous circulation and causing the skin to perform its functions more vigorously. After the shirt comes the petticoat: this should also be made of flannel, and should be made very long and wide. Next comes the frock or robe, which should be easy, long and warm. Its sleeves should be long, and its neck very high. There are few things more injurious to the tender infant than the fashion which many mothers follow, in exposing the thorax, and almost the whole of their arms, at all seasons. If any portion of the child's body really demands protection from the cold, physiology would teach us it must be those parts that are not very profusely supplied with blood. This is the case with the arms; being as it were remote from the common source of the circulation and heat, they are more exposed to cold, and therefore require almost double protection.

V.—Some Diseases Produced by Carelessness in Dressing Infants: a Case.

I am well satisfied from my own personal observation, that many diseases of infancy and childhood are caused by this undue exposure of the arms, especially in cold weather, even if the room in which the child is kept feels comfortably warm to the nurse or mother; and any one may be convinced that the child suffers, by feeling his arms, which are almost always colder than the rest of his body. The mute little creatures not only suffer within doors, but they are frequently allowed to be carried out, without any additional covering, when the weather is by no means warm; and so long as they are unable to make known their sufferings by speech, their protectors are too ignorant to know that they are laying the foundation for future disease, or a long life of wretchedness. After such exposure to cold as just described there is always a powerful effort of reaction to overcome the injurious impression. Now a moment's reflection will lead any enlightened mind to the conclusion that such efforts frequently occurring in children of irritable constitutions, and especially those that are very feeble, will in the end produce serious disorders in the lungs or bowels. I could cite many cases from my note-book to substantiate this opinion. Here is one:

September 8, 1858.—Called this day to see Jane, aged eighteen months. Has been under treatment for the last four weeks. Dr. M. considers her disease cholera infantum, has exhausted his stock of therapeutics, and pronounced an unfavorable prognosis. The little patient is indeed very low; pulse very feeble; respiration quite hurried; a slight hacking cough; tongue clean and moist; skin cold and clammy; countenance pinched; bowels very loose, swollen and flatulent; stomach retains food well, which she takes with avidity; urine scanty, and after standing a few minutes in the night vessel, looks like milk, but being subjected to heat, yields no albumen; head is somewhat warmer than natural; extremities cold; emaciation is very extreme. She has been quite restless for several days, and for the last eight hours there has been threatening symptoms of convulsions; several teeth have just pierced the gums, which are but little inflamed, and can not be the source of very much trouble.

From a careful examination of her early history, I find that she has been subject to frequent attacks of bowel complaint, ever since she was three months old, and that they always appear to be induced by some extra exposure to cold. The present attack I traced directly to an evening ride, when the atmosphere was quite cool, without any extra garments to preserve the animal heat. Her ordinary clothing was a flannel petticoat, a cotton shirt and frock made very low on the neck, and short sleeves. I attempted to explain the nature of the case to the parents; recommended that all her clothing should be of flannel, high in the neck and long sleeves. The little patient was to be bathed regularly every day in warm water, and the surface of its body carefully dried with a soft napkin, and her diet was to be confined to beef tea and bread jelly. Under this management she was gradually restored to health, and I have never known her to be sick a day since; her clothing, summer and winter, has been flannel. In this instance medicine was of no avail, nor could it have been so long as a fundamental law of the child's hygiene was neglected. And I might just add that I have on several occasions cured the most alarming cases of spasmodic croup, by simply clothing the child in flannel. I remember one case in particular, a little boy who was very subject to this malady. He never had an attack of it after his mother made him a flannel under-garment, which encased his whole body.

VI.—The Powers of Calorification Progressive in Children.

Experience teaches us that from infancy to manhood calorification is progressively performed with greater facility; so that as a child advances in age, till he arrives at maturity, he needs proportionally less protection by artificial means. But the general practice is quite the reverse, most children being thinly clad, and only having the quantity of their clothing increased as they increase in years. I have observed that among certain classes of the community, it is common to make clothes for the younger children of garments already half-worn by the parents, or some other member of the family. This may be well enough so far as economy is concerned, but when that is made an offset to health and comfort, the balance is found greatly in favor of the latter. It is a fact that a new garment is much warmer than an old one; and we may well suppose that the light heart and buoyancy of youthful spirits do not compensate in a cold season for thin or inadequate clothing. A shirt, and that often of not great longitude, with a jacket and trowsers of half-worn stuff, is the ordinary dress in the winter season of boys of the common class; and many are not able to afford their children clothing as comfortable as this. The children of very poor parents, who go half-naked, and without shoes or stockings, in the most inclement seasons, are often cited as instances of the benefit of a toughening system; and so, also, are the rare self-taught genuises brought forward as a proof that education is not necessary to attain to great eminence. The one case only proves that some children can live through undue exposure, while we entirely lose sight of those who die in this attempt at hardening; and the other is an evidence that a man may become great by the force of native talent alone, while we may fairly conclude that he would be still greater with the aid of a regular education. Parents should, therefore, be instructed to provide at least as warm clothing for their children as they do for themselves, ever bearing in mind that a child is but a tender plant, little calculated to endure the rude and chilling blasts of our Northern clime, and that if we would counteract any predisposition to tuberculosis that may be lurking in its system, we must not neglect to maintain its animal heat.

VII.—The Dress of Children should be Loose and Easy.

The child's garments should not only be warm, but they should be arranged upon its person in such a manner as to place no constraint upon the motions of any part. We have already referred to the injurious effect of making the band too tight, in early infancy, around the child's bowels, but how much more injurious must it be, when it is but a few years older, to encase its entire chest in the "barbarous corset." The injuries inflicted upon the young girl's chest and abdomen by this article are well known to be of the most formidable character; the chest may be completely altered in shape, and the lungs diminished in their capacity, by a continued pressure so applied; while, at the same time, the stomach and liver are driven from their natural position, and made to press upon the organs of the abdomen.

Derangements of the functions of respiration, circulation and digestion follow as a legitimate consequence, and but too frequently lead to a premature grave, or what perhaps is equally as bad, to a life of debility and untold wretchedness. But why this sacrifice of health and life ? What are the ends to be attained by it ? Some tell us that it improves the human form, that it adds to its beauty. Nothing can be more absurd than this. Nature has made the figure of the human chest just right, and the only way that we can be of any use or assist in the production of a finely formed or symmetrical chest is to remove all restrictions, and secure, as far as possible, a free action of all its parts as will lead to their perfect development. Anything more than this is injurious, and should be strictly ignored. I am well aware that many women are so led away by the frivolities of fashion that they will frequently sacrifice the health and life of their children to attend to its minutest details. But this should not deter us from the faithful discharge of our duty. We should protest earnestly against every custom which is detrimental to the health and longevity of mankind. Our success in curing disease demands it, humanity demands it, and God requires it. Let us not, then, be recreant to our trust.

VIII.—Warm Clothing Necessary in the Management of Phthisis.

"What is true of prevention in childhood," says Dr. Morton, in his *Illustrations of Pulmonary Consumption*, page 253, "is of equal application in the therapeutic treatment of adults. In vain is the use of medicine, or the regulation of the diet; in vain are all the other precautions that ingenuity can devise, if the skin is not kept warm and its healthy secretion maintained by proper attention to the quantity and quality of the clothing. As winter approaches, the chest of the invalid should be coated in flannel up to the neck, and the same dress should be extended down the arms to the wrist, and where this material is insufficient to prevent the sensible access of cold, a buckskin vest ought to be worn over it. The body and lower limbs are to be protected in like manner, and particular attention given to the feet, for if the latter are habitually cold, the whole system will participate in the inconvenience.

"I could mention several examples, both in children and adults, in whom the constitution has been suddenly and effectually restored from a languid and almost hectic condition to comparatively robust health, by a timely change of dress in the manner above mentioned; and I must, once for all, repeat that without this precaution all other measures, whether prophylactic or remedial, will end in disappointment."

In Russia, where the climate is intensely cold, pulmonary tuberculosis is far less common than in England or the United States, where the climate is not so cold ; and Dr. Morton regards the difference as chiefly attributable to the Russian custom of keeping their houses warm, clothing themselves in furs, and taking particular care to preserve their feet from cold and damp. It is said that in that country the lower class of people suffer more from phthisis than the wealthy, owing to the absence of the comforts of life.

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ARTICLE IV.

Liability of Druggists.

BY HON. WM. LAWRENCE, BELLEFONTAINE, OHIO.

EDITORS LANCET AND OBSERVER :—In the September number, 1862, of the *Western Law Monthly*, published at Cleveland, is the report of a case decided by the Court of Common Pleas of Logan County, Ohio. It is *Thomas W. Kerr vs. Joseph S. Clason*, page 488, and involves somewhat the duties and liabilities of druggists and physicians. As this case, which was pending in my court, is now compromised, it may be a matter of interest to the medical profession to know the facts of the case. They are these :

James Wallace, of Ridgeway, sent a written prescription to the drug-store of Dr. J. S. Clason, here, to be filled, which was in substance as follows :

One quart spirits turpentine,
Four ounces British oil,
Four ounces oil of spike,
Four table-spoonfuls of nitric acid.

On the 8th of November, 1860, Jonathan McCormick, a clerk in the drug-store, filled in these ingredients in a three-pound bottle, in the order above stated. It stood in the bottle nearly ten minutes, when he corked it. He then picked it up, gave it a shake, when the cork flew out, followed by a stream of fire, exploding with a loud noise and great violence. Strange as it may seem, the bottle did not break. When the contents had about half blown out of the bottle, McCormick set it down on the floor or counter. This was in the back end of the store room, say twenty-seven feet from the front end. The show windows, with bottles, etc., in the front end of the room were blown out, and glass driven into an oak post twelve feet from the windows, perhaps one-third of an inch deep. The room was filled with flame similar to a powder flash. Persons up stairs felt the shock, and say e floor was jarred up so as to rise partially. Mr. Kerr, who was anding near the bottle, say four feet from it, was covered with flame, n out, his clothing on fire, and was sadly burned. His fingers came ff his right hand. It is supposed the neck of the bottle was accientally pointed at him. McCormick was seriously burned. His ttle boy, also near, was enveloped in flame and his clothes consideraly burned. All the parties recovered,—Mr. Kerr sadly disfigured. IcCormick's coat, pants and vest, all of strong goods, were torn into tters, yet did not take fire, nor was any violence done to his body eriously, though shocked and burned on his hands and face all over. he nitric acid used was "Commercial nitric acid;" the turpentine, ommon ordinary article. Dr. Clason thinks McCormick used sulhuric acid instead of nitric acid, as stated by McCormick. The tter, however, asserts that it was nitric acid.

This is written and approved by McCormick and Dr. Clason. Mcormick says he believes if the bottle had not been corked and shaken would not have exploded. No bottles on the shelves were broken. Vall paper in the store in rolls for sale was burned considerably, and ome articles on shelves where the contents of the bottle flew were urned. The articles were all put in without shaking. Dr. Clason ays he has very strict evidence that *it was sulphuric acid* that was ut in, and not nitric acid—and I have no doubt this is the fact.

[The following is the report of the foregoing case as given in the *Vestern Law Monthly* for September, 1862.]

1. A druggist, in preparing chemical compounds, is bound to use the ordiary *skill* and *learning* of competent, well educated men exercising the duties f that profession or business. He is also bound to observe, not merely *ordiary*, but the *utmost care*, prudence, foresight and caution, to avoid injury to ersons. If, in compounding a preparation, an explosion occurs from the want r neglect of such skill or care, resulting in injury to another person guilty f no fault contributing proximately to the injury, the druggist so causing e explosion is liable in damages therefor.

2. The law distinguishes between *care* and *skill*, requiring a higher degree of e former than the latter.

On the 5th October, 1861, the following petition was filed:

"The plaintiff, Joseph W. Kerr, complains of the defendant, Thos. Clason, for that the defendant heretofore, and before the committing f the injuries hereinafter mentioned, and up to and until the time of he said injury, did keep an apothecary shop and drug and book-store ombined, in the town of Bellefontaine, in said county of Logan, in hich, among other articles, combustible and explosive fluids, gases, nd other ignitible and explosive materials were kept for sale and use n pharmacy.—3 O. S. R. 488.

"That on the eighth day of November, A. D. 1860, at the place aforesaid, without any fault or negligence upon the part of the plaintiff, (Abbott Pl. 293; Spencer *v.* Utica R., 5 Barb. 337; Caswell *v.* Worth, 34 E. L. & E. 141) the defendant (by his unskilful and careless servant then and there, and theretofore wrongfully and improperly in the defendant's employ, and who was then known to the defendant to be unskilled in pharmacy, and in the handling of drugs and gases,) did then and there so unskilfully, wrongfully, carelessly and negligently handle, compound and attempt to mix said igneous, combustible and explosive fluids, gases and other materials, in the presence of the plaintiff, who was then lawfully in said apothecary shop and drug and book store, (see Abbott's Pl. 292; Caswell *v.* Worth, 34 E. L. & E. 141; Bird *v.* Holbrook, 4 Bing. 628; S. C. 15 E. C. L. R. 91,) as to cause an ignition and explosion; by reason of which the plaintiff was then and there badly burned, bruised, lacerated, wounded, maimed and disfigured, and thereby become and was sick, and sore; and from thence hitherto, continued feeble, sore, lacerated, bruised, wounded, maimed and disfigured, and still is. And the plaintiff thereby became and was during all that time and still is unable to attend to his usual business and lawful affairs; and was put to great expense, to wit, the sum of $400, in endeavoring to be cured of the said sickness, feebleness, soreness, burns, wounds, maims, lacerations, bruises and disfigurations, so occasioned by the defendant as aforesaid. And the plaintiff hath been and is, by means of the premises, otherwise greatly damaged.

"To the plaintiff's damage, $10,000.

"Whereupon the plaintiff asks judgment against the defendant, for the sum of $10,000, his damages so as aforesaid sustained.

STANTON & ALLISON, Att'ys for Pl'ff."

Demurrer to petition for following reasons:

"1st. Because it does not set forth facts sufficient to constitute a cause of action; 2d. Because it does not appear what was ignited or exploded; 3d. Because it does not appear the plaintiff became burned, bruised, lacerated, wounded, maimed or disfigured, by the ignition and explosion of anything; 4th. Because it does not appear but that the burning, bruising, laceration and disfiguration, of which the plaintiff complains, was upon him previously; 5th. It does not appear that said gases, fluids, or other materials, ignited or exploded. Chapman *v.* Pickersgill, 2 Lord Raym. 953.

WALKER & WEST,
KERNAN & JOHNSTON, } Att'ys for Def't."

By the Court: W. LAWRENCE, J.—The demurrer in this case requires me to decide whether, if all the matters averred in the petition are true, the plaintiff has a right to recover damages. The *gravamen* of the complaint is, that the plaintiff, without any fault or negligence on his part, (Mad River R. R. *v.* Barber, 5 O. S. R. 568,) while lawfully in defendant's drug-store, was burned and bruised by the explosion of a mixture of fluids and medicines, improperly and negligently compounded there by defendant's clerk. This charge imputes a wrong to the defendant, resulting in injury to the plaintiff, to which no improper act or omission of his contributed as a proximate cause, and from which he could not have escaped by any reasonable prudence or foresight on his part.

In 3 Blackstone's Commentaries, it is said—"Injuries affecting a man's health are where, by any unwholesome practices of another, a man sustains an apparent damage in his vigor or constitution, as by selling him bad provisions or wine; by the exercise of noisome trade, or by the neglect or unskilful management of a physician, surgeon or apothecary; these are wrongs or injuries unaccompanied by force, for which there is a remedy in damages by a special action on the case."

The authorities which show the liability of physicians, surgeons and druggists, for every negligent or unskilful act or omission of duty, resulting in injury, are numerous. Many of them are collected in the recent valuable work on "Malpractice and Medical Evidence," by Elwell, Chap. 12, p. 25, and 169 notes; Kerwhacker *v.* R. R. Co., 3 O. S. R. 193; Leighton *v.* Sargent, 7 Foster N. H. 460; 22 Pa. (10 Harris) 261; 1 Bouv. Inst. 404; 2 Id. 502; 3 U. S. Dig. 135; Howard *v.* Grover, 28 Maine (15 Shep.) 97; Wood *v.* Claff, 4 Sneed Tenn. R. 65; Simonds *v.* Henry, 39 Maine 155, (4 Hert;) Chapman *v.* Pickersgill, 2 Lord Raym. 953; Hilliard on Torts, *passim.*

This petition states facts which, if true, will enable the plaintiff to recover damages.

Until this case shall be tried on its merits, it will not be necessary very fully to decide upon and explain the degree of care and skill which druggists are required to exercise. There may, perhaps, be a distinction between the degree of care and that of skill, which the law exacts of them; for men are capable of exercising a high degree of care, who may possess comparatively little skill. It is but the dictate of reason, the perfection of which is law, that druggists, having the custody and preparation of explosive and dangerous fluids and chemical compounds, should, in their mixture and use, employ not merely ordinary, but the utmost care and caution to avoid injury to life and limb—that is, the care usual with very prudent druggists. And this care should be such as would be exercised by the most prudent and cautious of those having a competent knowledge to enable them to judge when danger may be likely to arise—at least that usual, ordinary, or reasonable skill generally possessed by well-educated druggists—not, indeed, the highest learning and skill, which can only be attained by few men of rare genius, endowments, or opportunities, for this would be impracticable; but that usually possessed by those esteemed competent in their business. In fact, if the ingredients to be compounded in a mixture are such that a well-educated druggist should reasonably suspect danger from an explosion, then he is bound to exercise the highest degree of care to avoid injury to life or limb.

For an injury thus resulting in an omission to exercise such care, or to use such skill, or from any negligent act committed, he is liable. And he is equally liable, whether the injury result from his own act or omission, or that of his clerk, apprentice, or servant in his employ. —Little Miami R. R. *v.* Stevens, 20 O. R. 441.

In stating the rule as to the degree of care requisite, I have adopted that applicable to common carriers of passengers, who are responsible for the smallest negligence. This is adopted because necessary to the safety of human life—Redfield on Railways, ch. xvii., sec. 149, p. 323; McKinney *v.* Neil, 1 McLean R. 540; Maury *v.* Talmadge, 2 Id. 157; 4 Gill. R. 406; 19 Wend. 236; 13 Id. 611; Boyce *v.* Anderson, 2 Pet. S. C. R. 150; Stokes *v.* Saltonstall, 13 Pet. 181-192; 3 Bing. R. 321; Hall *v.* Steamboat, 13 Conn. 319; Ingalls *v.* Bills, 9 Metc. 1; 21 Conn. 557, 245; 13 Id. 319-326; Jones *v.* Voorhes, 10 O. R. 145; 2 Cowp. R. 81; 2 Esp. R. 533; 5 Id. 273; Aston *v.* Heaven, 2 Esp. R. 533; Fink *v.* Potter, 17 Ills. R. 496; Christie *v.* Gregg, 2 Camp. R. 79; Tallmadge *v.* Zanesville, 11 O. R. 197; Harris *v.* Costar, 1 C. & P. 636; White *v.* Boulton, Peake's C. 81; Sharp *v.* Gray, 9 Bing. R. 457; Taylor *v.* Day, 16 Vt. R. 566; Curtis *v.* Drinkwater, 2 B. & Ad. 169; 3 O. S. R. 193; Mad River R. R. *v.* Barber, 5 O. S. R. 558; 3 Kernan R. 9; Story on Bailm., sec. 601; 2 Greenl. Ev, sec. 222.

These cases seem to recognize a distinction between care and skill; but as between a railroad company and its passengers, the utmost degree of care and skill, both, is required of the carrier; not only in the preparation but also in the management of the means of conveyance. —5 O. S. R. 558; 3 Kernan R 9.

But the cases referred to in "Elwell on Malpractice" show that a higher degree of care than of skill is required.

Judging by these tests, the petition states more than is requisite to make a cause of action.

The demurrer is therefore overruled.

Defendant may have leave to answer and controvert the averments of the petition, for which purpose the case is continued to next term.

NOTE.—When injuries to the *person* are sustained, the law *presumes* negligence from proof of the *fact* of the injury.—Redfield on Railways, Chap. xvii, 326; Note to section 350; Nashville R. R. *v.* Messinc, I. Sneed 221; Carpue *v.* London, 5 Q. B. 747; Laing *v.* Colder, 8 Pa. 483; Galena R. R. *v.* Yanrod, 15 Ills. 471; 17 Id. 509; Albright *v.* Penn. 14 Texas R. 290; Frink *v.* Potter, 17 Ills. 406; 3 Kernan 9; Hegerman *v.* Western R. R. 16 Barb. 356; Holbrook *v.* Utica R. R. 16 Id. 113; 20 Barb. 282; 13 Pet. Sup. Ct. U. S. R. 181; Skinner *v.* L. B. & S. R., 2 E. L. & Eq. R. 360; Gillennater *v.* Madison R. R. 5 Ia. R. 340; Faresh *v.* Rugle, 11 Grat. 697; Christee *v.* Grigge, 2 Camp. 79; Ware *v.* Gay, 11 Pick. 106; Stockton *v.* Frey, 4 Gill. 406. See contra, Holbrook *v.* Utica R. R. 2 Kernan 236.

The reason, perhaps, is found in the regard which the law has for the safety of *persons*, and the fact that it is the duty of persons having the care of the[illegible] as carriers, to use the utmost care to avoid injury to them.

This presumption of negligence does not arise from the fact of an injury t[illegible] *property*. The negligence must be proved.

But see contra, Redfield, sec. 165, and cases; Danner's case, 4 Rich. 329; Wilson *v.* Ralson, 10 Rich. S. C. R. 52; Murray *v.* Ralson, 10 Rich. 227; Beer[illegible] *v.* Housatonic R R. 19 Conn. 566; 17 Ills. R. 198.

Proceedings of Societies.

Proceedings of the Cincinnati Academy of Medicine.

Reported by W. T. Brown, M.D., Secretary.

Hall of Academy of Medicine, March 23, 1863.

Diphtheria.—Dr. John Davis read the following remarks: I propose in this paper to give the views of Bretonneau on the subject of diphtheria. The name which he gave the disease was *diphtheritis*, from διφϑερις, that which is covered with leather. The word *diphtheria* (διφϑερα, the prepared skin of an animal) has been substituted very generally for *diphtheritis*. "*Pellicular exudation*" are, also, words used to characterize the peculiar phenomenon which Bretonneau was the first to describe as pertaining to the diphtherical condition. Pellicula is from *pellis*, the skin. Pellicular exudation, therefore, implies in its present application a skinlike secretion covering only a limited amount of surface.

Many who regard themselves as followers of Bretonneau will report cases of sore throat, stating that they do not consider them as cases of diphtheria, and giving as a reason for this conclusion that they did not observe any pellicular exudation. In other words, they take the position that this disease is not present, unless they can, though the patient be living, perceive the characteristic exudation.

That there is misunderstanding of his teaching is not, however, strange, considering that he never embodied his mature views in any one publication. He first issued his "*Traité de la Diphtherite*," and afterwards contributed memoirs upon the subject according as he found reason to modify his first conclusions. What he considered as established in regard to this disease is as follows, viz.:

1st. That a pellicular exudation is present in every case of diphtheria; that its seat is on the fauces, in the mouth, in the nares, or somewhere else in the course of the air passages.

2d. He believed that the characteristic exudation of diphtheria is, anatomically, *sui generis*,—*i. e.*, not capable of being induced by any other condition than the presence of diphtheria. Cantharides, applied in a particular way, he found to produce a pellicle closely resembling that of diphtheria; but it proved to differ materially in its properties from those of the real diphtherical exudation. The cantharidis pellicle lasts only a few days. It has no power of extending itself beyond the surface to which the flies had been applied.

3d. He held that ulceration is never present in this disease; that the surface under the exudation is often reddened and sometimes tumefied; but there is never loss of tissue.

4th. Pathologically, he regarded the exudation as a concrete specific poison, as is that of primary syphilis, and that the virus is capable of propagation only by the application of a portion of the pellicle from an affected to a sound part, or from one person to another. He did not believe that it is communicated by volatile, invisible emanations, susceptible of being dissolved in the air and of acting at a great distance from their point of origin.

5th. He considered diphtheria as a proper generic term for all forms of epidemic sore throat, and included malignant angina and croup in the genus.

6th. It was his view that malignant gangrenous angina is not gangrenous. This conclusion was a necessary sequence to his postulate, that the surface under the pellicle is never ulcerated.

7th. He established, by historical researches, to his full satisfaction, that all of the forms of sore throat which have been termed malignant angina, notwithstanding that these epidemics have presented different phases, were all identical in nature, and are properly to be comprised in the genus diphtheria.

8th. When he wrote his treatise on diphtheria he believed the affection to be always purely local. Children, he said, having this disease will play and retain their habitual appetite—mortality being caused only by mechanical obstruction to respiration, consequent upon the accumulation of membranous exudation. But, subsequently, he admitted that in some cases there is present a *toxæmia*, to which the depressing effects of diphtheria are attributable. But this poisoning of the blood he considers as only the effect of the presence of the local virus.

9th. As to many cases of this disease he did not require that the peculiar patches be seen; he often considered the presence of coryza and of glandular swellings below the jaws as sufficient proof of the presence of diphtheria, considering it is then certain that the pellicle was really somewhere, though it was not discoverable.

Bretonneau was an earnest student, and it must be conceded that his description of the diseases on the banks of the Loire, is probably correct. But his views were not found to apply fully to epidemics elsewhere, even in France. Trousseau, who early adopted his opinions on this subject, wrote at a later period, "that the diphtheritic disease, in innumerable instances for the last seven or eight years, has killed at once by the constitutional affection without the participation of a local difficulty."

With Bretonneau's views as a whole I do not agree; that it is a purely local disease, except so far as the local mischief may induce general difficulty, I do not believe. That diphtheria extends in no other way than that indicated by Bretonneau I hold to be contradicted by the every-day observation of cases of this disease. I believe that it may extend by simple contagion, using the term as we do when speaking of the contagion of scarlatina or rubeola. I believe, too, that epidemic influence is often active in causing cases of this disease. As to the croup which he regarded as a species of diphtheria, I think that it was evidently an atonic affection deserving only the name of laryngeal diphtheria.

More than this, I deem it as not proved that all epidemic sore throats are identical in character, and that ulceration is never present in diphtheria. But I shall not pursue the subject farther on the present occasion, proposing at a future time to treat of the subject more extensively.

Dr. Murphy—Said he supposed his friend Dr. Davis had some particular views of his own which he wished to give the Academy, when he proposed at the last meeting to give the opinions of Bretonneau on diphtheria. But he only gives us a very brief synopsis of Bretonneau's opinion, without any expression of his own views. He thought his friend had unintentionally misrepresented or misquoted Bretonneau,—that diphtheria is not always carried by contagion; second, that diphtheria is not always attended with a deposit or exudation of false membrane, or else physiologists must change the name, because diphtheria means a membrane. He thought no one could read the classical memoirs on diphtheria by Bretonneau, Guersant, Trousseau, Bouchut and others, without coming to the conclusion that you can not have a case of diphtheria without the presence of the false membrane somewhere, and that every epidemic leaves behind it something for the next disease or epidemic to take its origin from. We can not have ulceration, and call it diphtheria. A true diphtherite consists in the effusion of this membrane. Bretonneau looked upon it as a local disease. In this he was wrong. He looked upon it as a constitutional disease, attended with local phenomena.

Dr. Almy—Asked Dr. Murphy whether there was any account of diphtheria until within a few years past.

Dr. Murphy—Said there was a history of it published in 1793 by Starr. And at a later period Dr. Nathan Smith wrote an account of the disease.

Dr. John Davis—Said he did not intend to write on the whole subject of diphtheria, but merely to give a synopsis of Bretonneau's opinions, and he thought the gentleman's criticisms were hardly fair. But if he was wrong in quoting the opinions of Bretonneau, he would be obliged to the gentleman to show him his error. The fourth point in his division of Bretonneau's views is as follows:

> "Pathologically, he regarded the exudation as a concrete specific poison, as is that of primary syphilis, and that the virus is capable of propagation only by the application of a portion of the pellicle from an affected to a sound part, or from one person to another. He did not believe that it is communicated by volatile, invisible emanations, susceptible of being dissolved in the air, and of acting at a great distance from their point of origin."

This was Bretonneau's opinion at the time it was written, and if he had written anything different from this, he did not know it.

The Doctor proposed giving his own views at some future meeting. It is a mistaken idea that the exudation must be somewhere where you can see it, in order to constitute diphtheria.

Dr. W. P. Thornton—Asked Dr. Davis to define the difference between diphtheria and membranous croup.

Dr. Davis—Said membranous croup is a sthenic disease, and you must move fast or you lose your patient. Laryngeal diphtheria is slow and asthenic in character. The cough is much the same in both. In laryngeal diphtheria the patient is prostrate from the first; in the other disease febrile action is high. The membrane in each is the same, according to Bretonneau, but there is a difference in the duration of the exudation.

Dr. Thornton—Said he begged leave to differ with the gentleman. Croup is a general term. He looked upon old-fashioned membranous croup and diphtheria as identical. One may be more acute than the other; but this membrane in both is an exudation of fibrin from inflammation. He thought diphtheria under another name had always existed. He had seen an exact cast of the membrane in diphtheria and in membranous croup, and he believed both were alike.

Dr. J. B. Smith—Thought the gentleman left out one very impo[illegible]tant pathological condition in the differential diagnosis. That in crou[illegible] the disease may come on suddenly, apparently a local trouble, follow[illegible]ed by constitutional disturbance, while in diphtheria the constitutio[illegible]al disturbance precedes the local manifestation. The exudation do[illegible] not appear until the patient is prostrate. Secondly, the exudation in croup is plastic, not so in diphtheria. In croup, by active antiphlogistic treatment your patient gets well in a few days. In diphtheria, this treatment proves injurious. He had seen the exudation in diphtheria accompanied with purpura over the body; also seen it accompanied with well marked symptoms of typhoid. He looked upon it as a constitutional disease, and it is often accompanied with an eruption. He could not see how gentlemen could confound the two diseases.

Dr. Carroll—Said he saw the worst form of diphtheria in 1824. There were four cases in one family. He was called in consultation. They all had the exudation in the throat. The attending physician had applied blisters to the outside, and the blistered surfaces were covered with the same false membrane. It was his opinion that Cullen had described the disease much better than the French. Cullen considered it merely a form of scarlatina. He had seen one case lately with the deposits in the throat. He always treated the disease by means of depletion. If he had looked upon it as a new disease, he would have lost patients with it occasionally. The introduction of new names for diseases has a wonderful effect in this country. The quacks make use of them to gull the people. He had seen more croup this winter than ever before, and he depleted in every case almost, and the treatment was successful. It is important that we should come to some conclusion whether a little sore throat, with a little wheezing, is diphtheria or something else. When there are deposits we can not use the same treatment as when there are no deposits, but must rather stimulate. Unless we make a distinction we always get into an error in our treatment. In cases where the exudation is of a mahogany color, and particularly if attended with a running from the nose, the disease is most surely fatal. In a case of diphtheria where there is heat of skin and a strong pulse, calomel is the best remedy, it will do the most good. He believed the diseased condition was brought about by suppressed secretions. He proposed giving the Academy, at some future meeting, his views about the treatment of scarlet fever.

Dr. Murphy—Complimented Dr. Davis for the paper he read before the Society. Its wit was in its brevity. But his old friend, Dr. Carroll, he said, occasionally lets off some of the most singular doctrines that the human ear or scientific mind can be gratified with. And it certainly comes with a very bad grace for him to say at this day we are absolutely know-nothings. The Doctor here read from the writings of Bretonneau, in order to make his own statements more clear, the report of a case of diphtheria following chronic pulmonary catarrh, in an old woman, age sixty-two. The case proved fatal. Autopsy twenty-four hours after death. Bretonneau says at first sight the mucous membrane of the trachea and the larynx seemed pale and swollen. The edges of the epiglottis especially were remarkably thickened. A redness with points of a more deep red color, exactly resembling that which characterized diphtheritic inflammation, was observed toward the middle of the trachea, where it formed unequally prolonged striæ. This peculiarity caused a pellicle to be observed, the existence of which might not have been even suspected if we had not have seen it separated and elevated on the edges of the incision made into the windpipe. The Doctor remarked that two aphorisms might be laid down in regard to diphtheria. First, that any other treatment than a stimulating one has not succeeded. Second, as to curing a disease called membranous croup, which is laryngeal diphtheria, with calomel, he would say it would not do. Bretonneau says by giving calomel to many patients, he broke them down. If we are permitted to lay down an aphorism in this city, we may say that the great majority of cases are only amenable to supporting treatment.

Dr. John Davis—Said this question whether it is necessary to see the exudation or not in order to constitute a case of diphtheria, was raised long ago. Bretonneau and his pupils found in thirty-six examinations which they made the exudation present somewhere, though not to be seen during the life of the patient.

Dr. Carroll—Said it was a dangerous conclusion to come to that a patient from presenting certain symptoms must have diphtheria. We know that these deposits, such as the gentlemen say are symptomatic of diphtheria occur, when there is no disease of the kind in the country. And the case brought forward by Dr. Murphy from the writings of Bretonneau was one of pleurisy, but called diphtheria because these deposits were present; but you often find the same kind of exudation in pleurisy and in pneumonia. He had no doubt the disease was contagious and specific in its origin; but this way of arguing from nothing is a poor way to come at truth. He maintained that in these cases we must see the exudation, and have the general symptoms, such as swelling about the tonsils, etc.

Dr. Tate—Asked Dr. Carroll in regard to the four cases he spoke of attending in 1824, whether there was any eruption accompanying the disease.

Dr. Carroll—Said there was no eruption in those cases, but he had seen cases in his practice with an eruption, and went on to give some of his experience in the treatment of scarlet fever. He bled one year all of his cases, thirty in number, and he then thought he could cure scarlet fever by bleeding; but afterwards he lost two cases, which led him to modify his views somewhat in regard to bleeding.

Dr. Wm. B. Davis—Said diphtheria first made its appearance in the northern part of the city about five years ago, and he well recolected his own feelings in regard to the disease, and the skepticism expressed by practitioners down town about there being such a disease. He first pursued the antiphlogistic treatment, but was unsuccessful in combating the disease. He then adopted the stimulating and supporting treatment, muriate tinct. of iron, expectorants, local application of nitrate of silver, beef essence, ale, etc., and was successful. In conversation with his brother at that time, he found his experience corresponded with his own. Subsequently, the European journals announced the same plan of treatment as requisite in this disease. And by way of illustrating the skepticism of some persons in regard to the disease, and the treatment he had decided upon as the best, he would report the following case. He had under treatment a well marked case of diphtheria. A member of this Society was called in consultation, and being skeptical in his views of the disease, he turned up his nose at the treatment; and as they could not agree in regard o treatment, the consulting physician took charge of the case. He used mercurial ointment locally, and the patient died in three days. He considered it an asthenic disease, and he did not wait for the exudation to call it diphtheria; if he did, he lost important time. Quite ecently, in a family he attended, after performing a surgical operation with the assistance of another physician, and while cleaning his intruments, the mother asked him to examine the children's throats. He asked his friend to look at them and prescribe. He examined the ases and thought there was nothing the matter, and made no precription. The next day when he made his visit, he found the exudaion, though it was not present the day previous. He regarded it as trictly an atonic disease. The case which he spoke of before in the Academy, a little boy two years old, had diphtheria, and was sinking apidly, refusing everything; he thought he would die; but it occured to him that as he was a German child he would prescribe lager beer, and at his next visit he found he had drank one quart in twenty-our hours; he was much better, and improved from that time. He was not surprised that there was a difference of opinion regarding diphtheria, but that there was so much difference he did not expect.

He had often seen an eruption in diphtheria. It appears and disappears suddenly.

HALL OF ACADEMY OF MEDICINE, April 13, 1863.

The Academy having been called to order at the usual hour, the minutes of the previous meeting were read and approved.

The President announced that the essay read by Dr. Roelker before the Society last Monday evening was open for discussion.

Dr. W. P. Thornton—Said he did not rise for the purpose of discussing the paper, but he must say he had never heard a paper equal to it read before any Society in this country. It is of a higher character, more scientific than any we have had. He presumed most of the members felt as he did, unprepared to discuss the essay ; and he would be pleased to have the paper published.

Dr. Roelker—Made some remarks in regard to the great naturalist of Göttingen, and how he attained such a celebrated reputation. And as for the essay he read before the Society, it was no investigation of his own. He was a mere gleaner. He thought he would make a concise paper and give it to the Academy. He claimed no encomium for himself. And while he was up he would state that Dr. Leuckart was publishing a new work on the subject of parasites of the human body and the diseases which they produce. He would also call attention to a new disease, produced by the trichinas spiralis. The first notice given of the disease produced by this parasite is in Braithwaite's *Retrospect*, part xlii. Since, several epidemics have been reported, and the treatment adopted. In one place there were thirty cases. The worm comes mostly from cattle, also from pork. It was first discovered by Robert Owen, of London.

As no one proffered to discuss the essay, the President announced the reports of cases in order.

Dr. Blackman—Reported the following case. He operated upon a patient during the day, who had been under his care for three or four weeks before he decided to operate. He was embarrassed for some time to know where to locate the disease, whether in the spine or thigh, but finally concluded the disease was in the upper part of the shaft of the femur, and that he would make a free incision over the trochanteric region down to the bone, and if he found the bone carious as he suspected, he would trephine and scoop out the diseased bone. The patient had been leeched freely over the hip, and blisters had been applied with only temporary relief. He was thirty or thirty-five years of age, rather lean. He had almost constant pain in the knee and shaft of thigh bone. Pressure on the knee gave him no pain, but he upper part of the shaft was quite tender. He found the femur rough and easily penetrated, in fact, completely carious, although the integuments were sound. The disease was of eighteen months duration. He scooped out all the dead bone, and thought in six or eight weeks he would have a complete formation of new bone. The Doctor remarked he liked this operation (evidement or scooping out the dead part of bone and leaving the shell) in many cases better than exsection. The reproduction of bone is favored by leaving the periosteum and a small portion of the osseous tissue. He had operated in quite a number of these cases, as well as of disease of the shaft of the radius and ulna, and with excellent results—the movements of the limbs were very satisfactory. He felt a particular interest in these cases, and claimed priority in performing the operation. His first case for disease of the hip joint was operated upon Dec. 23, 1855, just three days before Ledillot's first operation in France. His experience had shown him that the surgeon was justified in cutting through sound structures down to the bone, for in some instances where the bone was quite carious, the soft parts had not become involved.

Dr. Thornton—Asked Dr. Blackman the symptoms in the differential diagnosis of disease of the shaft and hip joint.

Dr. Blackman—Replied that this fixed tenderness on pressure along the upper part of the shaft, the absence of synovial inflammation and swelling, and freedom from pain on motion, were the symptoms on which he most relied. The pain at the knee would seem to corroborate the doctrine maintained by some, that in hip joint disease this symptom might be due to inflammation of the medullary tissue, and not to pressure on the obturator nerve.

Dr. Murphy—Reported the following case of dry gangrene in the Third Street Military Hospital. The man got shot at the battle of Stone River, the ball entering at the head of the flexors of the forearm, fracturing the condyle. He has contraction of the biceps flexor, so as to prevent him extending the forearm. Within the last few days vesicles have appeared on his fingers, and to-day dry gangrene is in progress, occasioned he believed from a want of nervous nutrition. The man is twenty-seven years of age. He has lost all sensibility in part affected, yet there is as much heat in this one hand as in the other.

Dr. W. P. Thornton—Suggested the possibility of its being a case of embolia. He did not believe gangrene followed a loss of nervous sensation, because we see many cases of paralysis, yet no gangrene results. He believed dry gangrene brought about by obstructed circulation, not a want of nervous nutrition, but due to embolia, a plugging up of the arteries; parts die from inanition.

Dr. Blackman—Said it was singular that simple lesion of the ulnar nerve should cause gangrene of the finger, for the hand was liberally supplied with blood, and in the case reported by Dr. Murphy some three months had elapsed since the injury; and we all know the tendency to reproduction of nervous tissue after division or exsection. He referred to cases of this reproduction where in his own, as well as in the practice of other surgeons, it had followed the excision of the median and sciatic nerves, and thought if the dry gangrene of Dr. Murphy's patient was due to the injury of the ulnar nerve, it should have occurred at an earlier period after the infliction of the wound. He remarked that dry gangrene was not peculiar to old age, for he had seen cases in early life. Mr. Solly, of St. Thomas' Hospital, London, had reported a case in a child three years of age. And Dr. Hecker, of Stuttgart, had reported a number of cases in persons under thirty years of age; and Dr. Crisp, in his treatise on disease of the blood-vessels, had given the details of similar cases. Dr. B. said he was present at a meeting of the Royal Medical and Chirurgical Society of London in 1847, when Dr. Fuller, the author of the well-known work on rheumatism, read a paper showing that dry gangrene was not due solely to ossification of the arteries, but that it may arise from a peculiar condition of the blood itself. And perhaps in Dr. Murphy's case it might proceed from arteritis, or some peculiar condition of the blood, unconnected with the injury of the ulnar nerve. Mr. Guthrie had reported a case of gun-shot lesion of this nerve, but in none, so far as he, Dr. Blackman, could recollect, did gangrene of the finger follow.

Dr. Murphy—Said Brown-Sequard reports the following case. A boy, fourteen years of age, had been out fishing one afternoon. He came home well. The next morning he got up, but fell over. He was found on the floor screaming; said he had an awful dream. Just as soon as he would touch the floor with his foot, he would have a convulsion. Examining his foot, he found a grain of sand under his big toe, and whenever he touched this he would have an epileptic convulsion. The grain of sand was removed, and the patient had no more spasms. He thought Dr. Blackman's remarks very pertinent to these cases. In the case he reported, the ulnar nerve is injured. But he did not agree entirely with Dr. Thornton that we must have embolia before dry gangrene commences. His patient does not complain of pain. Mr. Hilton, in his lectures in the *London Lancet*, gives similar cases. We also have gangrene arising from the use of the secale cornutum.

Dr. Fries—Said he had a similar case of injury of the ulnar nerve resulting in the loss of the little finger. This thing of injury of the nerve causing the destruction of parts below is not an unfrequent occurrence. Some twenty years ago, a man came to New Lisbon, and proposed to cure hoof-bound horses by cutting, as he claimed, a nerve at a particular point; but in every instance in which he tried this practice the hoofs were destroyed. He thought these things go to show that the division of a nerve will frequently destroy parts below. He had never known a case of dry gangrene in a young subject, except as the result of injury of some important nerve.

Reports of Committees.—Committee on Admission reported favorably upon the applications for membership of Drs. D. D. Bramble and C. P. Wilson, who were unanimously elected.

Reviews and Notices.

Chemistry. By William T. Brande, D.C.L., F.R.S., and E. of Her Majesty's Mint, etc., etc.; and Alfred Swayne Taylor, M.D., F.R.S., Fellow of the Royal College of Physicians of London, and Professor of Chemistry and Medical Jurisprudence in Guy's Hospital. "*Experimentis et præceptis.*" Philadelphia: Blanchard & Lea. 1863.

Among the large number of works of chemistry which have appeared of late, none, we feel sure, will be received with more pleasure than this one by Brande and Taylor. To the medical student chemistry is a forbidding subject, for the reason that it has been made a very difficult one of comprehension by writers. The truth is, there is no subject in the medical curriculum on which there is so gross ignorance. Chemistry as taught in the schools presents but few practical points to the student. In the office of the preceptor it is wholly ignored, from the want of an excellent text-book, and the want of knowledge of the subject on the part of the preceptor. Our authors well say, that "there are numerous books on the science which occupy an intermediate position,—some, under the title of 'Elements,' treating the subject so profoundly as to alarm a beginner, while others are so filled with symbols, formulæ, and mystical language, as to conceal the great facts of chemistry in a haze of technicality." The object of the authors has been to make chemistry intelligible to every educated man. The book is divided into four parts. In the first part we have matter and its properties considered. The second part is devoted to metalloids, the third to metals, and the fourth to organic chemistry.

The authors have been teachers of chemistry for more than thirty years, and have succeeded, we think, in giving to the student and practitioner a book easy of comprehension and fully up with the knowledge of the whole subject. It is published in excellent style, and is for sale by Robert Clarke & Co., Fourth street, at $3.50.

Annual Report of the Board of Directors and Officers of Longview Asylum, for the year 1862.

This is the third annual report of this asylum, by Dr. O. M. Langdon, the Superintendent. It is an excellent report, reflecting great credit on the Superintendent and Board of Directors.

As our readers are no doubt aware, this asylum is entirely supported by the people of Hamilton County. It is an institution of which every one may well feel proud. We speak from some observation when we say, that it is one of the best arranged and best managed institutions in the world. In Europe no finer or better furnished building can be found.

The results of treatment during the year are highly satisfactory. At the close of the year 1861 there were in the house 357 patients ; during the year 1862, 138 were received. Of this number 92 were discharged cured ; improved or unimproved, 26 ; and 31 died. The rate of mortality is nominally 6.26, but really 5.7, as three persons were received in a dying state. Of those discharged cured, 48 were males and 44 females ; improved, 12 males and 14 females ; and of the dead, 17 were males and 14 females. The average number of inmates has been 365, costing $119.90 each per annum, or $2.30 each per week.

There are many interesting tables given in the report, which we are sorry we can not copy. Among the causes we are astonished to find so few cases occurring from the political condition of the country.

Dr. Langdon has been employing a large number of the inmates in and around the institution, with the best effect in the management of the various forms of insanity. He says that the patients so employed are "much more quiet in the wards and sleep better at night." The inmates by their labor have greatly assisted in beautifying the grounds, and thus saving a large amount of money to the county. The Doctor calls attention to the need of more ground for farming and gardening purposes. It was a great oversight in those who located the site of the Asylum, that they did not secure a large quantity of land. For e benefit of the patients, and for the economy of the house, this ersight should be remedied by adopting the plan recommended by r. Langdon.

Attention is called to a class of insane who are deserving of better eatment than they now receive. No provision is made for the negro natics. There is no place for them but the common jails and prisons the various counties. While they pay taxes, they should certainly ve some other retreat or asylum than the miserable places they are w confined in.

Longview Asylum is well worth a visit from every one. It is the st institution in the State. Instead of presenting anything forbidng, it strikes one as a palace of comfort and elegance. Its manageent by Dr. Langdon has been the best. Few persons possess exutive and administrative abilities of so high an order. We say this, owing the thousand difficulties attendant on organizing so large an tablishment and keeping it in good working order.

It may be well for our readers to know that private patients are reived into the Asylum by paying a small compensation weekly.

Editor's Table.

☞ The office of the *Lancet & Observer* is removed to 319 Elm Street, bereen Ninth and Court. This point is convenient of access to strangers in the ty; and it will afford us pleasure to see any of our friends, or the friends of is journal, at our new office.

Ohio State Medical Society.—The eighteenth annual meeting of the hio State Medical Society will convene agreeably to adjournment, at e White Sulphur Springs, on Tuesday, June 16th, 1863. The offial notice will be found elsewhere in the present number of this jourl. For two years past the meetings of our State Society have been ld in the midst of the general embarrassment and disturbed condion of the country attendant on a great civil war; and yet the meetgs have been well sustained, and all who attended were delighted ith the social and scientific reunion. It is fair to presume that the eeting this year will be unusually well attended, and we hope with nusual interest. We know that several of the committees are engaged the preparation of their reports, and we hope *all* will be full preared.

In this connection we observe with great pleasure and satisfaction that the Springs will this season again be under the management of the old proprietor, Andrew Wilson, Esq., so well known as the most capital landlord that ever catered to the comfort of a guest; and we have ample assurance that every effort will be made for the pleasure and satisfaction of physicians coming up to their annual gathering.

An effort will be made to secure half-fare passes from the railroads of the State, the result of which will be duly announced, so that, if successful, all may avail themselves of the arrangement. We hope, therefore, that not only all the old members, but the great body of our working profession, who have not participated in the meetings of the State Society, will this year lay aside their harness and go to White Sulphur Springs, with their wives and children, and for once in the season forget business and enjoy a few days of recreation.

The Medical College of Ohio is in the midst of its special summer session, with a large class, there being near seventy matriculants on the books.

Death of Dr. Charles Fishback.—It is with deep and sincere sorrow that we announce the death of Dr. Fishback, of Indianapolis. We had hoped to receive a full obituary notice from some of our Indiana friends, but have been disappointed. His death was from a dissecting wound, received, as we understand, in making a post-mortem examination of a puerperal fever case, but have had no definite particulars.

The death of Dr. Charles Fishback is a loss to the profession of Indiana. He was high-toned in all his opinions and practice, one of the most active and zealous members of the State Society, an ardent worker for the elevation educationally of his profession, and above and beyond all a sincere Christian gentleman.

Medical Society in Gen. Granger's Army Corps.—The surgeons of all the regiments composing Gen. Granger's army corps (near Franklin, Tenn.,) have formed themselves into a regular medical association. At the first meeting, held April 25th, Surgeon Beach, of the Fortieth Ohio, read an excellent paper "On the True Character and Duties o Army Surgeons," which has been kindly forwarded to us by Surgeon Matchett, also of the Fortieth Ohio, for publication. We thank Dr. M. for this remembrance, and trust we shall hear regularly of the proceedings of this Association.

The American Medical Association.—We are greatly pleased to learn from the last number of the *Chicago Medical Examiner*, that the profession there are united and cordial in making ample arrangements for the accommodation of the meeting of the Association. It expresses "full confidence that the coming annual meeting will be well attended; that its members will transact the legitimate business of the Association with dignity, harmony and profit; that they will revive and extend past associations and friendships, and by their liberality of sentiment and their strict adherence to the proper objects of the Association, they will set an example worthy of imitation by all other conventional organizations, whether religious, political or scientific."

The Health of the Western Armies.—We have recently conversed with several surgeons from Gen. Rosecrans' and Grant's armies. They all agree in representing the health of the troops as excellent. This is especially true of the Army of the Cumberland. Under the excellent direction of Dr. Glover Perin, Surgeon U.S.A. and Medical Director of Gen. Rosecrans' army, the health and comfort of the troops has greatly improved. Dr. Perin is one of the most indefatigable and conscientious surgeons in the army. His recommendations for improved cooking and general sanitary regulations have been fully endorsed by Gen. Rosecrans. The army is well supplied with every thing in the medical line.

It is a matter of some pride to us to know that four of the surgeons and directors of Divisions of the Army of Gen. Rosecrans are from this city, and that they are regarded by Dr. Perin as efficient and faithful officers.

Fæcal Baths at Vienna.—The medical journals tell us that there is in Vienna a bathing establishment, where the baths are formed of the contents of the bowels of recently killed oxen. The establishment issues a large list of cures effected by its pollutions. The efficacy of these baths is attributed to their temperature, to the gastric acids contained in them, the salts, the gases, and the electrical action produced! —*Brit. Med. Journal.*

The Medical News and Library to this very properly remarks: "Are there any limits to human credulity, or any species of quackery too disgusting or absurd not to find dupes?"

Longview Asylum.—Drs. J. B. Hall and J. W. Mock have been appointed Assistant-Physicians to the Longview (Hamilton Co., Ohio,) Lunatic Asylum.

Deceased Surgeons of Ohio Regiments.—The following list has been furnished us, which will be read with interest. They make part of the roll of honorable dead.

Names.	Time of Death.	Regiment.
Surgeons.		
Brown, L. C.	November 12, 1862,	Eighty-fifth.
Carlin, Wm. D.	January 26, 1863,	Fifty-seventh.
McMeens, R. R.	October 30, 1862,	Third.
Pierce, Chas. R.	... ...	
Spillman, Henry	.. ..	Fifteenth.
Assistant-Surgeons.		
Davenport, James	March 26, 1862,	Ninth.
Dean, Wm. T.	September 17, 1862,	Twenty-fifth.
Fisher, N. H.	January 25, 1862,	Fifty-sixth.
Lewis, John K.	October 14, 1862,	Forty-eighth.
Miner, J. N.	... ...	Forty-second.
Muenscher, Robt. P.	.. ..	Seventy-sixth.
Norton, Greenleaf C.	October 11, 1862,	Forty-sixth.
Purple, John G.	May 13, 1862,	Twentieth.
Sayers, G. W.	... ...	One Hundred and Second.

In the above list we observe the name of Dr. Jno. P. Haggott is overlooked.

Military Changes.—By order of Gen. Burnside, Dr. L. H. Holden, late Director of the Department of Ohio, has been removed, and Dr. W. H. Church, of the General's staff, assumes the duties of Medical Director of the Department. Dr. Holden remains in the city awaiting orders. As soon as Gen. B. takes the field, Dr. Church will go with him. The executive duties of the office will devolve on Dr. J. T. Carpenter, Surgeon U.S.V., and Superintendent of Hospitals in this city, Covington and Camp Dennison. He will be assisted by Dr. Holmes, Surgeon U.S.V., of Gen. Cox's staff.

Ohio State Medical Society.—The annual meeting of the Ohio State Medical Society will be held at the White Sulphur Springs, commencing on Tuesday, June 16, 1863.

Edward B. Stevens, Secretary.

—— Prof. Lepman, of Jena, the learned chemist, and the author of a work on Chemical Physiology, died in February last.

Medical Classes of Philadelphia Schools.—The class at the University for the last winter's session was 310; that of the Jefferson, 262. The number of graduates at the University was 78; at the Jefferson, 82.

Medical and Surgical Reporter.—We have just received the last number of this journal for vol. ix. of the weekly series. With this number Dr. Levis retires from his editorial connection with the *Reporter*.

—The military hospitals in Lexington, Ky., have been closed, and the patients transferred to the hospitals in this city and Camp Dennison. It is the intention of Dr. Church, the Medical Director, to send all sick and who can bear transportation to this city and Camp Dennison.

New Books.—New editions are announced of Meig's "Obstetrics," Cazeau's "Obstetrics," Bedford's "Clinical Diseases of Women," Mendenhall's "Vade Mecum," Wilson on "Diseases of the Skin." These new books will doubtless be on hand in season for due notice next month.

—M. Casper, the learned Professor of legal medicine at Berlin, celebrated some weeks ago a remarkable day in his laborious scientific career. He performed his thousandth medico-legal autopsy. We can understand the peculiar propriety of the line *Quod vidi scripsi*, at the head of his "Manual of Legal Medicine."

Pathological Examinations.—In the best hospitals of Europe it is the custom to make a careful record of the autopsies. Thus in the Vienna General Hospital, the great field of operations of Prof. Rokitansky, there is a record of this kind kept, from which a vast fund of valuable statistics are continually drawn. We find in a recent number of the *Boston Medical Journal* a synoptical table of the *post-mortem* examinations made in the Vienna General Hospital during the year 1861, under the direction of Rokitansky. There were 1,464 autopsies during the year, affording a wide range of observation and result. Dr. Taylor is the very faithful and capable pathologist of the Commercial Hospital of this city, and we should be gratified to know that a similar careful record was made of his regular examinations. We feel very confident their regular publication would afford a large amount of valuable and interesting material, of which the profession would gladly avail themselves.

PAMPHLETS RECEIVED.—" A complete Record of the Surgery of the Battles fought near Vicksburg, Dec. 27–30, 1862. By E. Andrews, M.D., late Surgeon of the First Regiment Illinois Light Artillery, etc., etc." This is a reliable and carefully prepared account of the surgery of the Vicksburg battles, first published in the *Chicago Medical Examiner*, and now reprinted in this form. It is very readable, and of much value as a part of the surgical history of these times.

Sanitary Commission Reports, supplement to 59, concerning the aid and comfort given by the Sanitary Commission to sick soldiers passing through Washington.

"*Hints on the Treatment of Strangulated Hernia.*—By John O'Reilly, M.D., etc., etc." This is an interesting essay read before the New York Academy of Medicine, and while it gives a brief sketch of the general points to be observed in the management of hernia, it is especially devoted to the consideration of the value of opium as a therapeutic agent in these cases ; together with an attempt to give the anatomical and physiological explanation of its action. Inasmuch as Dr. O'Reilly is somewhat peculiar and original in his style of thought, we quote from his essay the following paragraph, which expresses the leading point of his demonstrations.

" To answer these questions in a rational and scientific manner it is important to inquire how or what becomes of the opium on being administered ? When the opium is taken into the stomach by the mouth, it passes into the intestinal tube, it is taken up by the lacteals and lymphatics, gets into the venous circulation, is carried to the right side of the heart, commingled with the venous blood, from thence to the lungs, and next to the left side of the heart, from whence it is distributed all over the body by the aorta, its branches, ramifications, and capillaries ; the opium incorporated with the blood is brought in contact with the organic nerves on the internal coats of the arteries which communicate with the organic nerves of the external coats of the arteries through the branches of nerves which connect the internal and external coats ; it is further communicated to the organic glands in which the capillary arteries terminate, and capillary veins commence. The opium causes the contraction of the arteries to the smallest diameter by its action on the organic nerves, as well as suspends the operation of the organic glands. Thus it will be perceived that all the capillary arteries everywhere distributed become contracted, and that the action of the cerebral glands become suspended, the volatile agent secreted by these glands ceases to be secreted or to stimulate the nerve tubules of the brain, by whose action the operations of the mind are carried on, as well as the nerve tubules of the nerves, causing the arrest of sensation and motion. Thus it is the operations of the mind become suspended as indicated by sleep, and thus, too, the individual becomes insensible of pain, and incapable of locomotion, as well as, in truth, dead to all external influences. The organic glands of the peritoneum, on the principles indicated, cannot secrete lymph or serum, the capillary arteries cannot become dilated, and consequently cannot furnish arterial blood to the organic glands ; therefore, as the capillary arteries are kept in a contracted state, and the organic glands placed in a quiescent condition by the narcotic influence of the opium, it follows as a consequence, that inflammation cannot ensue, or in other words, increased vascularity, known by the dilated state of the bloodvessels with the effusion of lymph or serum, cannot take place. But it will be said this explanation is Utopian, is a mere assertion, without proof, or is the product of an eccentric mind, and cannot be demonstrated ; it is, therefore, important to inquire, can any proofs or occular demonstration be given of the action of opium on the organic nervous system? Yes; occular demonstration is afforded by the action of the opium on the pupils, they not only become contracted, but are immovably fixed ; the iris, it will be remembered, is largely supplied with nerves from the lenticular ganglion, and it shows the condition of the organic nerves and glands all over the body, namely, that they are contracted and fixed."

"*On the Treatment of Diphtheria,* with illustrated cases. By E. N. Chapman, M.D., Professor, etc., in the Long Island College Hospital." This is a reprint from the *Boston Medical and Surgical Journal.* We have read no essay on this subject which expresses positive views so clearly and with so much evident point as this of Dr. Chapman, and upon the practical question of *treatment* we reprint the following views of the author :

"In the thirty-eight cases of diphtheria detailed above, this alarming disease is presented in almost every varied phase. With a singular uniformity the stimulating treatment, whether in the acute or chronic stage—that of excitement, fever and inflammation, or of prostration, paralysis, rheumatism or dropsy—had the same happy effect ; and it was in all conditions, that had a diphtheritic origin, uninterruptedly followed ; since we only regarded the causation, not its manifestations —the root of the evil, not its offshoots—and directed our efforts to the removal of a special state of the blood. This state of the blood, which is prone to occur in scrofulous children, or adults reduced by disease or of feeble constitutions, in a certain endemic condition of the atmosphere, is marked by a diminished vital power ; which being exalted by stimulants, the symptoms are checked, the inflammation subdued, the membrane removed, a rapid recovery effected and relapses prevented. In other words, this plan of medication is radical ; strikes at the heart of the trouble ; whereas most others, that have been proposed, are but an ineffectual warfare against symptoms. The blood, which is similarly affected in the mild or severe cases, in the first or later stages, only differing in the degree of its dissolution, alone claims our attention. Against this condition, before the disintegration is irreparable, we bring to bear the most powerful means in our hands, to buoy up the constitutional powers, and sustain the activity and energy of each function. The first link in this morbid chain being this retrograde movement in the vitality of the blood, when this is checked, fever, inflammation, hæmorrhage, exudation, collapse, paralysis, dropsy, etc., disappear, almost magically, from the simple fact that the cause has been rendered null and inoperative, and the prime pathological change removed.

"Of the remedies that have been employed in diphtheria, two only have proved themselves in our hands worthy of confidence, with the exception, in the chronic stage, in favor of the salts of iron. These two remedies—alcohol or cinchona in one of its forms—are administered in such doses and at such intervals as to secure one effect—the fullest stimulation of the nervous and vascular systems. Either singly may suffice when the vital force needs but slight aid to maintain the integrity of the blood; but the two united have more than a double power, and call out the greatest possible amount of resistance; since the nerve centres and bloodvessels—the great life-factors—are exalted to the highest point. Alcoholic liquors, when given in such quantities and intervals as to occasion and keep up a steady but not excessive excitation, not only quicken the fuctional offices of each organ, but act more especially on the nervous and vascular systems. They bring out the latent powers, arousing them when dormant, and freeing them when oppressed by a load of morbific influences; and thus give, for the time being, the greatest energy to the entire organism. Herein, according to the views of many therapeutists, alone consists the value of this class of stimulants in any disease. The patient lives over the crisis, or the poison is spent or eliminated; and thus recovery becomes possible. This is but a partial estimate of the remedial action of alcohol; which not only produces the effects just mentioned, but others of much greater importance in the present disease—the increased vitality of the blood itself. It is well known that the habitual use of spirituous beverages augments the blood-making process, renders the blood richer in all of its important constituents—the red globules, albumen and fibrin—and of a greater crasis; by which means, there arises an excess of organizable material, that often occasions inflammatory diseases in *bonvivants*. This condition is the opposite to that existing in the diphtheritic subject, whose blood has invariably been rendered poor by exhausting disease, or impoverished by the demands of increase and growth, as in the instance of children. These causes are intensified and rendered operative by a scrofulous or syphilitic taint.

"It is a noteworthy fact, that, in my experience, the diphtheria never attacks those habituated to the use of spirits. This, if confirmed, may be more than a remarkable coincidence.

"We, therefore, from clinical observations and therapeutical deductions, arrive at the practical conclusion, that alcohol is not only a stimulant to the system at large, but also to the blood itself, quickening its vital elaborations, and increasing its vital status; through which a direct barrier is thrown in the way of the disease. In other words, the results produced by the disease, and by the alcohol in the lood, being directly opposite, they neutralize each other ; and thus he stimulant assumes in our eyes the position of a true remedy, a rustworthy antidote. Hence its medicinal power being not only remeial, but prophylactic, will prevent the extension of diphtheria in the ther members of the family, as well as cure the one affected. This onclusion is a necessary sequence, if the pathology of diphtheria and e *modus operandi* of alcohol have been correctly appreciated.

“ In malignant cases of diphtheria, we might desire to avail ourelves of a coöperating remedy ; of one, like quinia, that particularly xcites the great ganglionic nervous centres ; by which means we hould attain a maximum of power, and carry stimulation to the highst possible degree. The various preparations of the cinchona bark lfil this indication ; and, when pushed to the extent of causing tinnias aurium, are our most potent nerve-stimulants. Their efficacy is hown in all diseases when the innervation is weakened, disordered r perverted ; in fevers from malaria, in fevers from a blood-poison, nd in a variety of morbid conditions attended with an exhausted or dective nervous energy. As a tenderness of the gums is a mark of the turation of the system with a mercurial, so the ringing in the ears dicates that the brain is fully under the influence of cinchona. Both and the alcoholic stimulant, whether used singly or united, should e given with regularity and in sufficient doses to obtain their full efcts ; and then the latter, in a lessened quantity, continued for two or ore weeks after the disappearance of the disease and its sequelæ. rom the outset to a permanent restoration to health, one, or perhaps oth, of these remedies are to be continuously administered.”

Resignation of Prof. Samuel Jackson.—We learn that Prof. Jackon, who has so long and very ably filled the chair of Physiology in e University of Pennsylvania, intends at once to tender his resignaon. Dr. J. was an enthusiastic, highly interesting, and brilliant cturer, and inspired his hearers to a great extent with his own zeal r physiological investigations. We wish him in his retirement the pose he is so well entitled to, with health, long life, and every mfort.—*Phil. Med. News.*

The Marshall Hall Physiological Test for Strychnine.—It is related f Dr. Marshall Hall, in his biography, that at one time the number f criminal poisoning cases, and the conflicting evidence in regard to e employment of strychnine in some of these, set him thinking on e subject. His long series of experiments on the nervous system ad rendered him well acquainted with the action of strychnine upon e frog, and “it occurred to him that the extreme susceptibility of this nimal to the influence of strychnine would constitute it the most deliate test of its presence, thus substituting a physiological for a chemial test. Aided by Mr. Bullock, of Hanover street, he performed a ries of experiments, by which it was at length satisfactorily demontrated that a young frog might be rendered tetanic by the *five thoundth part of a grain* of strychnine ! ” These experiments were comunicated by him in detail to the *Lancet* in 1856. This ingenious suggestion of our great English Physiologist has recently been acted upon at North Shields in the post-mortem examination of Mrs. Gilhespie, an account of which will be found in our pages. It is stated in *The Times* of November 8th that "a *drop* of an acidulated solution of the residue from the stomach and duodenum brought in contact with the skin of a young frog produced violent convulsions. Three or four additional drops were applied, with intermission, and it died at the expiration of half an hour."—*London Lancet.*

Death of Dr. Charles Hooker.—It is with regret that we announce the death of the distinguished physician, Dr. Charles Hooker, of New Haven, on the 19th of March, at the age of 64. The deceased had been a supporter of our *Journal* almost from its beginning, and in past years communicated many valuable articles for our pages. From an obituary in the *New Haven Daily Palladium*, we make the following extract:

"Dr. Hooker was born in Berlin, in this State, a descendant of that eminent and gifted man who was the leader of the first settlers of Hartford, the Rev. Thomas Hooker. He graduated with honor in Yale College, in 1820, in the class of which President Woolsey and Dr. Bacon were members. On graduating, as he afterwards did from the Medical Institution of the College, he began practice in this city, and from that time to this he has been known as one of the busiest and most indefatigable men in this community. In 1838 he was appointed to the chair of Anatomy and Physiology, and the numerous graduates of the Medical School can testify to his great skill and energy as a teacher.

"The character of Dr. Hooker was not a common one. An independent thinker, his energy prompted him to press his views upon the minds of others, and he therefore made a decided impression upon the principles and practice of his brethren in the profession. No man ever showed more earnestness and assiduity in his calling, and these were just as manifest in his last days, when most men incline to some relaxation of their labors, as they were when the ardor of his youth was upon him. Faithful and energetic to the last, he exposed himself freely to cold and fatigue, in behalf of some patients in whom he felt a deep interest, even after his sickness had fairly begun, and so he may be said to have died in the very midst of his labors. What we deem to be the grand fact of his professional life, standing out prominent before all others, and written in deep lines upon the hearts of multitudes in this community, is, that he performed his labors for the sick irrespective of reward; for he was just as ready to obey the calls of the poor as those of the rich. The genial and ardent social qualities of Dr. Hooker added much to his influence, and therefore his usefulness as a physician. We may add to this brief notice the fact that he was a member, for we know not how many years, of St. Paul's Church, and none will more deeply feel his loss than the pastor and members of that church."—*Boston Med. and Surg. Journal.*

Contagion of Secondary Syphilis.—Among the victims of contagion of secondary syphilis, writes M. Diday in *Gazette de Lyons*, are the glass-blowers at Giers and Vernasion. The frequency of syphilis among this class of workmen has long been observed, and the fact also that the disease almost always commences in the mouth. Three individuals are obliged to blow forcibly, one immediately after the other, into a hot iron tube, which they are forced to compress strongly with their lips. Hence, therefore, if in one of the three syphilitic disease of the mouth should exist, its propagation is readily effected. At Lyons we continually meet with cases of syphilis which have been contracted in this way; and occasionally there arise actual epidemics of the disease. M. Diday has presented this state of affairs to the magistrate of the district, and has recommended that a capable physician should be appointed to superintend the *blowers* in these glass establishments, and to prevent any one who has a syphilitic disease of the mouth using the tube alluded to.—*Brit. Med. Journ.*, Nov. 29, 1862.

Curara in Hydrophobia.—The Commission appointed at the Milan Hospital for the purpose of testing the value of curara as a remedy for hydrophobia, have reported that it has failed to establish its claims as a remedy.—*London Lancet.*

Medical Secrecy.—The Medical Societies of Paris are at present exercised in regard to the question, whether a physician when consulted with regard to the health of a patient in reference to marriage, should refuse to give any information? The societies of the viii. and ix. arrondissements have decided as to the obligation of secrecy; while the society of the vii. arrondissement has declared that while in general the above rule is correct, there are also circumstances in which the dictates of conscience are above the law [a higher law]. This last seems to us to be a dangerous decision, and one which might lead to great abuses.

Knowledge gained by a physician in his professional capacity should be deemed sacred, and not to be divulged under any circumstances. It is very questionable whether it be safe to make any exceptions to this rule, and if any be made, they must be extremely rare.—*Phil. Med. News.*

DR. HULLIN, in his work on *Medicine and Surgery* lately published, tells how he got rid of a pencil five *centimètres* long and six *millimètres* thick from the bladder. He made his patient retain his urine for as long a time as he possibly could; and when he could hold it no longer, to lean over a table, to grasp its edges firmly, make a deep inspiration, and then force out the urine with all his might. On the very first attempt, the pencil flew out to some distance, and without causing any great pain. M. Hullin recommended this plan from a knowledge of a hydrostatic law. When a vessel with a narrowish opening at the bottom is filled with water, and the opening is suddenly set free, the liquid in escaping makes a whirling motion at the opening; in this whirl floating bodies are seized, and turned so that one of their extremities is presented to the opening. The bladder represented the vase in this case. M. Bousquet says that the former M. Sedillot relieved himself in a similar way of several small calculi.—*British Med. Journal.*

The Origin of Cow-pox.—The Imperial Academy of Medicine of Paris has appointed a commission to inquire into the origin of vaccine. —*London Lancet.*

Army Medical Intelligence.

Surgeon Wm. Clendenin, U.S.A., is ordered to duty at Gallatin, to relieve Surgeon Hamilton, U.S.A., who reports for duty in Nashville.

Surgeons James Bryan and T. A. Worrall, U.S.V., now on duty in Washington, will report for duty at the Headquarters of the Department of the Tennessee.

Surgeons G. W. Stipp and John C. Dorr, U.S.V., now on duty in Washington, will report for duty at the Headquarters, Department of the Cumberland, as soon as the hospitals under their charge are closed.

Assistant-Surgeon J. S. Billings, U.S.A., now on duty in the West Philadelphia Hospital, is directed to report to Surgeon Jonathan Letterman, U.S.A., Medical Director.

Assistant-Surgeons W. W. Wythes, S. D. Turney, D. J. Gloninger, C. F. Haynes and J. W. Minster, U.S.V., to report in person to the Medical Director of the Department of the Cumberland, and by letter to the Assistant Surgeon-General at St. Louis, Mo.

Assistant-Surgeons J. R. Ludlow, G. R. Weeks, H. P. Mathewson, H. N. Fisher, and M. K. Moxley, U.S.V., to report in person to the Medical Director, Department of the Tennessee, and by letter to the Assistant Surgeon-General at St. Louis.

Surgeon William H. Gobrecht, U.S.V., and Assistant-Surgeons J. W. Lawton and A. M. Wilder, U.S.V., to report in person at the Headquarters, Department of the Ohio, and by letter to the Assistant Surgeon-General at St. Louis, Mo.

The resignation of Assistant-Surgeon R. O. Craig, U.S.A., has been accepted by the President, to take effect April 7, 1863.

The resignation of Surgeon D. H. Agnew, U.S.V., has been accepted by the President, to take effect April 6, 1863.

A Board of Medical Officers, to consist of Medical Inspector R. H. Coolidge, U.S.A., Surgeon Meredith Clymer, U.S.V., and Assistant-Surgeon Roberts Bartholow, U.S.A., will convene in Washington on April 10th, to prescribe rules for governing Boards of Enrollment, in determining who shall be exempt from draft, as physically and mentally unfit for the service.

A Medical Board to consist of Surgeon Henry Janes, Third Vermont Volunteers, E. B. Dalton, Thirty-Sixth Vermont Volunteers, and Surgeon S. W. Oakley, Second New Jersey Volunteers, have been ordered to convene at the Headquarters of the 1st Army Corps, Army of the Potomac, on April 11th, for the examination of such medical officers as may be ordered before them by the Medical Director.

GENERAL ORDERS No. 69.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE, *Washington, March* 20, 1863.

Paragraph 10 of General Orders, No. 36, of 1862, which authorizes the chief medical officer in each city to "employ as cooks, nurses, and attendants, any convalescent, wounded or feeble men, who can perform such duties, instead of giving them discharges," is hereby modified as follows :

At every U. S. General Hospital the feeble and wounded men, unfit for field duty, but not entirely disabled, instead of being discharged, will be organized and mustered in detachments, under the charge of the officers acting as Military Commanders, who will assign men to them from time to time, on the reports of the surgeons in charge of hospitals. From these Invalid Detachments the Military Commanders will make details for provost, hospital, and other necessary guards ; for clerks, hospital attendants, nurses, cooks, and other "extra duty" men. The Invalid Detachments will be mustered and reported as detachments, and will be paid on the Detachment Rolls ; but no *extra* pay will be allowed in any case.

The Detachment Rolls must show to what company and regiment each man properly belongs, and all assignments to them must be promptly reported to their company commanders. They are not to be dropped from the rolls of those companies, but will be reported on detached service from them.

Should any of the men become fit for duty with their regiment, they will be immediately sent to join them.

In case of a want of non-commissioned officers to give efficiency to the Invalid Detachments, lance appointments may be made, but without increase of pay.

By order of the Secretary of War :

L. THOMAS, Adjutant-General.

GENERAL ORDERS No. 80.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE, *Washington, March* 31, 1863.

It is hereby ordered that all Surgeons and Assistant-Surgeons belonging to regiments, who are absent on any other than regimental duty, shall without delay rejoin their regiments. Medical officers of regiments will not hereafter be detached upon other service, except temporarily in cases of necessity, or where the Surgeon and two Assistant-Surgeons are present, when one of the Assistants may be detached to hospital duty.

By order of the Secretary of War:

E. D. TOWNSEND, Assistant Adjutant-General.

CIRCULAR No. 18.

MED. DIRECTOR'S OFFICE, MIDDLE DEPT., 8TH ARMY CORPS,
Baltimore, Md., April 5, 1863.

The Surgeon-General having approved the suggestion to designate the General Hospital at Chestnut Hill, Philadelphia, by the name and in commemoration of the distinguished and lamented Surgeon Thomas G. Mower, of the Army: It is hereby announced, that in tribute to the memory of one to whom the Medical Department of the Army owns so much of its present position, who purified its ranks, elevated its standard, and rendered his own name synonymous with the character of the corps, this institution shall hereafter be known as the Mower General Hospital.

J. Simpson, Surgeon U.S.A., Medical Director.

Special Selections.

Relative Numbers of the Sexes at Birth.

An article on the relative numbers of the sexes at birth, by Dr. Whitehead, published in the *Medical Times and Gazette* of Nov. 8th, 1862, contains some very interesting and curious statements. The well-known fact of the preponderance of male over female infants is borne out by his carefully collected statistics, taken from the government registers of a large part of Europe. In Central and Northern Europe, it appears that the relative proportion of the sexes at birth stands at about 106 males to 100 females. This is true in eleven of the principal European States, viz.: Russia, Saxony, Austria, Wurtemberg, Bavaria, France, Hanover, Norway, England, Prussia, Belgium—ranging from the maximum in Russia, 109.55, down to the minimum in England, 104.77.

Some very curious inquiries and reflections growing out of these statistics are considered by the author. It is found that the great preponderance of male births does not lead to a steadily increasing preponderance of male over female adults, for the rate of male mortality preponderates sufficiently to keep down the ratio; in England, emigration also helps to bring down the proportion of males to females in the whole population to a point considerably lower than on the Continent.

The author shows that the common impression, that among illegitimate children there is a large predominance of males, is erroneous. It is remarkable how near the ratio comes to that in the case of legitimate children. Thus in England, during fifteen years ending with 1859, the average ratio of male illegitimate children at birth was 104.26, and of legitimate children 104.70 to 100 female—an advantage of .44 per cent. in favor of the legitimate. It is thought that the incomplete registration of illegitimate births in England may detract from the reliability of these statistics; but the general statement is borne out by the fuller registration of the Continent. Here we find that in eight of the principal countries of Central Europe the same rule holds. The proportion of males to females born *in* wedlock is one and a half per cent. greater than among children born *out* of wedlock. These statistics settle the question beyond a doubt, and in a way directly contrary to popular opinion, here as well as in Europe.

We confess we are somewhat surprised to find that in England the number of illegitimate children born is in about the same proportion to the legitimate as it is in the territory of its supposed much less moral neighbor over the channel. In England the percentage of illegitimate children born is 6.50, and in France 7.61; a difference which would probably be greatly diminished, if it did not disappear altogether, were the registration of illegitimate births as accurate in the former as in the latter country.

Dr. Whitehead discusses the question of the cause of the preponderance of one sex over the other at birth, without coming to any very decided opinion about it. He groups together certain classes of population, and compares the statistical records to see if they will furnish any clue to the mystery; thus we have the following summary, and his conclusions:

"The following summary represents, in brief, the facts as above stated, with the addition of the average male birth-rate of the illegitimate:

	No. Males to 100 Females.	
	Legitimate.	Illegitimate.
Forty-three manufacturing towns..........	105.07	102.72
Fifty-three cathedral and county towns....	103.15	103.50
Sixty agricultural towns..................	105.00	105.91
London....................................	103.96	102.92
England...................................	104.70	103.40

"From these figures it would appear that the male birth-rate in this country stands the highest among those whose circumstances expose them to influences commonly considered to be more than all others prejudicial to life and health—inconvenient agglomeration, insufficient breathing-space, both at work and at home, an impure, ozoneless atmosphere, mephitic vapors, poverty, dissipation, squalor, and some others. It is clear, therefore, that these agencies can not be fairly reckoned among the causes of a low male birth-rate.

"The cause may possibly be sought for in the hereditarily continued habits of luxury and inaction, together with an excess of brain-labor as compared with that of the muscular system, inferrable from the character of the communities furnishing the second and fourth items."

With regard to another common opinion, our author says:

"Allusion to one popular notion, however, may be ventured here, if only to afford an opportunity of expressing a doubt of its validity, namely: that old men, sickly and feeble men, those of the lymphatic temperament, and they who have long suffered under specific ailments, are less likely to propagate males than females. This impression I believe to be unfounded in fact, as could be illustrated, if needful, by a multitude of examples. One such instance shall suffice. A gentleman (a well-known public character) of remarkable athletic power, married in early life a woman of his own age, and by her had three daughters, but no son; after which his wife died. At the age of 69, he was again married to a lady just half a century younger than himself, and by her had five children, the first four of whom were sons, and the fifth a daughter.

"The determination of sexuality is probably a process which belongs entirely to the female, and in which the agency of the male has no participation. And it is not improbable, or, at least, it would be difficult to disprove, that as many sons, comparatively, are born to old men as to young, to the weak as to the athletic, to the morbidly enfeebled as to the healthy. Nor does occupation, climate, poverty, wealth, or any other tangible circumstance, seem, in the male, to exercise a determining influence. The opinion is further strengthened by the marked tendency to the reproduction of one sex, whether male or female, in preference to the other, being hereditarily continued in the female, but not in the male."*

The whole paper is very interesting, and shows the most patient industry in collating and comparing such a vast body of statistics.—*Boston Medical and Surgical Journal.*

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* This point could have been easily elucidated from the records of the peerage and landed gentry, had the editor arranged the births in the order of their occurrence, instead of grouping the males and females separately, and having omitted the birth-dates of many of the latter.

Sensible Advice.—Dr. Miner, editor of the ***Buffalo Med. and Surg. Journal***, addressed the graduates of the Buffalo Medical College as follows: "He desired to do this for the benefit of the young men who are just entering the field of medical knowledge, that they may not neglect the longest lever of professional power, by which alone they may move the medical world. Medical colleges and their professors are a great power, and wield a wide influence, especially over medical students, and thus also over medical men. We are taught by them, however, in our pupilage the established and universally acknowledged principles of medicine, surgery, and the collateral sciences, while in actual practice we consult our written guides; then it is, that those only who write, are those who teach. Standard medical books are also a great power in the profession, but they are also dependent in great degree upon the Periodical Medical Press for both the material of which they are composed, and their adoption by the profession. Again, many physicians do not carefully read the voluminous works in medicine, while it is believed that all are more or less acquainted with periodical medical literature. These suggestions are made that this graduating class may not be unmindful of the importance to them of medical journals. You may be of value to the journals, but the journals are of vastly greater value to you. They are practically the only available medium of communication with the profession; through them you will learn much of what you will know, and whatever of any professional importance is ever known of you, will be through such medium. Your attention is therefore called to the periodical medical press, as the all-powerful influence in the profession."—*Am. Medical Times.*

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CONDUCTED BY

E. B. STEVENS, M.D., AND J. A. MURPHY, M.D.

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ARTICLE I.

On Tænia and Cysticercus.

GLEANINGS FROM THE WRITINGS OF LEUCKART, SIEBOLD, KUECHENMEISTER AND OTHERS.

[Read before the Cincinnati Academy of Medicine.]

BY F. ROELKER, M.D., CINCINNATI.

Caroline Schneemann, born January 9, 1860, had passed from her bowels fragments of tapeworm for the last eighteen months, when her mother asked me, in February last, whether there was no way of curing her child. She had been a year ago, during the winter, under the care of two physicians in succession, neither of whom succeeded in expelling the worm, but gave it up, after having tried a great number of remedies. The last assured her the child was too young and tender to bear the strong remedies which were requisite for the removal of the parasite. Hence she had given up all further medication; but her child was getting more and more sickly and feeble, and it was absolutely necessary that something should be done for her relief, if it was possible to get it. Upon closer inquiry, I learned that the child had been weaned in December, 1860, when about a year old; that it was fed at meal-times upon everything on the table, not only vegetables, but also meat; that at about this time of the weaning of the child they killed a pig, which was cut and put up for family use, although the pig had measles; that at this time and afterwards pieces of ham, sausage and raw meat were frequently put in the hand of the child to occupy it with sucking and chewing; that in the summer following the mother observed pieces of tapeworm in the child's stools, and that ever since—namely, these eighteen months—the child has passed from time to time fragments of the worm from her bowels.

I ordered an emulsion of pumpkin seeds, twelve ounces, prepared from six ounces of the seeds, with the direction of making the child drink the whole of it within two days, allowing her to take as much at the time as she was willing to. After the first day she passed about fifty inches of the broad end, and on the next all the smaller remainder of the worm, in all one hundred and thirty inches, or about eleven feet. Although she took the same day yet half an ounce of ol. ricini and one drachm of turpentine, not another particle of the worm came away from her; nor has it up to this day, eight weeks since the expulsion. The change in the child was immediate. She became cheerful, natural in her appetite, normal in her digestion and quiet in her sleep.

The instructive points of the case are:

1. That the pumpkin seeds prove to be a mild and reliable remedy for the expulsion of tapeworm. Dr. Mongeney, of Cuba, recommended in 1829 a mush of the raw pumpkin, three ounces of it to be taken in the morning upon an empty stomach, to be followed each hour by two ounces of honey, until three doses were taken. This would expel the worm within six or seven hours, rolled up in itself, even after all other remedies had failed. But it does not appear that this remedy could establish itself. In October, 1851, Richard Soule recommended, in the *Boston Journal*, two ounces of the seeds to be made into an emulsion with eight ounces of water, to be taken in the morning, fasting; and followed, if necessary, in an hour and a half by an ounce of castor oil. Lamotte, in March, 1852, praised the seeds in the *Union Médicale*, forty-five grammes (about one ounce and a half) of it with equal parts of sugar or gum, made into a paste and taken in the morning. Since that time we have in this country several cases on record of the successful administration of these seeds.

2. That Dr. Kuechenmeister's experimental demonstrations on the generation of tapeworm from the cysticercus cellulosæ, or measles of the pig, seem to be confirmed by this case.

Measles in the hog, although known already to Aristotle, were always considered a disease in the animal, a deposit of morbid matter, caused by over-heating, and the eating of the thus affected meat as unhealthy and injurious. But it was only at the end of the seventeenth century that Dr. Hartmann, a physician in Königsberg, made the discovery that these measles were vesicular animals, visceral worms like the lumbricoids and tapeworms,—a discovery which ten years later was confirmed and more in detail established as a fact by the celebrated Malpighi. Although thus their animal nature was

.red, nearly a hundred years more passed by before their relation to ia was recognized and demonstrated. Malpighi indeed had seen little head in the vesicular worm ; but the two founders of scien- helminthology, Pastor E. Goetze of Quedlinburg, and the famous .ogist Pallas, discovered on this head the same structure which racterizes the head of tænia—namely, the four sucking apparatuses, ntouses,) and between them on the top of the head the wreath of clawlike, strong hooks ; whereupon, in 1782, they maintained and lared the cysticercus to belong to the same kind with tapeworm. spite of this discovery, there were yet striking differences between cysticercus and the tænia. The one had a vesicle for the end of body ; the other flat, fleshy joints, many yards long. The one ned to be without means of propagation ; the other showed thou- ds of eggs in its ripe joints, etc. But these difficulties were ex- ined away by the relative places in which they were found, and ecially by the then prevailing erroneous idea of a spontaneous gen- tion of the worms (generatio æquivoca) from saburra, mucus or er matter. It was left to the labors and investigations of the hel- ithologists of our own days to clear away the mist and bring a full it upon this subject.

.t was known of many worms, that they never inhabit the same ce together with their brood or young ones, although their sexual 'ans are always filled with thousands of eggs. Ascaris lumbri- des, trichocephalus dispar, oxyuris vermicularis, were found only iwn or half grown in the intestines ; and although thousands and iusands of their eggs were seen mixed with the contents of the wels—(it has been calculated that one female lumbricoid produces : less than sixty millions of eggs)—yet their embryos never had been covered with them, neither within nor without their shells. It was ertained that these embryos never developed in their eggs while re- .ining in the intestinal canal, but had to be transplanted into an- ier suitable and appropriate soil. The eggs of the lumbricoid gra- ally grow microscopic little worms in the earth and in water ; there iy remain alive in their shells for years without leaving it, and thout getting killed by absolute dryness. To be sure, the next ases of their metamorphoses were not known, as they are not known ;. It had been proven by experiments of direct transplantation, it the embryo could not develop in the intestinal canal, this not ing its proper soil. But the rational conjecture was, that they be- me lodged in another inferior animal for a further transformation, til they finally by some yet unknown means should be carried to their legitimate boarding-place, the intestinal canal, to grow into lumbricoids. When this much was known of some of the intestinal worms, that their eggs had to pass from the body of their hosts; that their brood returned in some direct or indirect way to the body of animals; that they sometimes had to pass through the body of several animals, before they came to their ultimate development,—then it became clear to Siebold and others, that the cysticercus was a form of development for the future tapeworm, and not the tapeworm itself.

Siebold and Thomson had observed the striking resemblance in the shape of the head and the formation of the hooks between the tapeworm of the cat (tænia crassicollis) and the common measle of the mouse (cysticercus fasciolaris), and suspected from it that this measle developed into tapeworm after its transmission into the intestine of the cat. Yet Siebold did not know then that the measle is a normal and necessary state of development for the tapeworm. He thought that they developed without first being measles; that the embryo developed in the intestine immediately into tapeworm; that only those embryos which in their migration missed their way and got into the muscles instead of the intestine, degenerated and developed into measle or vesicular worm, of which they only could recover, if they found an opportunity to leave the wrong and find their right boarding-place.*

The true genetic relation between the measle and the tapeworm was not known until in 1852. Dr. Frederick Kuechenmeister, of Zittau, astounded the scientific world by his essay in *Prager Vierteljahrschrift*, in which he demonstrated by his direct experiments the truth of this assertion. He fed certain animals—*e. g.*, dogs and cats—upon measles of other animals—*e. g.*, rabbits, sheep; then watched and studied their progress in the intestines of these animals. He observed that they lost in the stomach, by the influence of the gastric juice, first the vesicle, the head resisting, and came in a few hours with the contents of the stomach into the intestine, where it affixed itself by means of its sucking apparatus (ventouses), and grew gradually into the shape of tapeworm; getting within three months to such a state of maturity as to cast off joints. Thus he solved the first question: the generation of tapeworm from the measle or cysticercus. But also the second question, the origin of the measle, he solved by the same experiment. Otto Fabricius had already discovered before 1782 that the measle of the pig was produced by tapeworm, and had read a paper on the subject. And Siebold in our days had shown that the eggs of the ripe tænia contained a small globular embryo, which had on the anterior egment of its body six hooks, wherewith it made strong motions within the shell that covered it. With these hooked embryos in the apeworm Kuechenmeister fed the appropriate animals, and succeeded n infecting them with measles ; *i. e.*, the tapeworms which had grown n the intestine of a dog from the measles of a rabbit, generated measles again if put into the stomach of a rabbit, etc. These experiments have since been repeated successfully by professed helminthologists, and the facts thus been established beyond all further doubt. The more accurate knowledge of the process of this metamorphosis we owe to the investigations of Haubner and Leuckart. According to the latter it is this: After the embryos with their six hooks have got into the stomach of the animal which is experimented upon, they have to migrate or change their abode in order to develop in liver, or brain, or muscle, into measles. The gastric juices dissolve the fleshy parts of the joints of the tapeworm and the hard shells of the eggs. Thus set free, the embryos bore through the walls of the intestines with their stilet-like hooks, and enter the cavity of the abdomen, and thence wander into the nearer and remoter organs. As soon as they meet with the proper conditions of their further development, they begin to grow. While formerly invisible to the naked eye, they appear now, surrounded by the cellular tissue, as white little bodies, pimples or vesicles, which continually grow in size the more since in their interior a watery fluid is collected, which expands their bodies like a bladder, and thus gives origin to the vesicle of the measle. And it is this vesicle which, sooner or later, after it has grown to the size of a pin's head, or a cherry, or a nut, according to the different kind of cysticercus to which it belongs, propells the head of the tænia by budding on the inner wall, which head, however, can not develop into a perfect tapeworm, unless it is transferred from its place into the intestine of another, an appropriate animal. While remaining on the spot of its original formation the cysticercus or measle stays unchanged, although slowly but steadily growing, until in more or less years it dies. That numberless measles and embryos perish without ever coming to a development, is a matter of course ; for if it was otherwise, the whole creation would be filled with measles, since each tapeworm generates in each of his numerous joints thousands of eggs and embryos, amounting in the aggregate for one year to many millions.

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* *Vide* R. Wagner's *Physiologisches Handwörterbuch*, vol. ii., Parasiten by Siebold, 1852.

After thus, by experimenting upon animals, the vital history of certain measles and tapeworms in animals had been ascertained, the next interest was to find out by positive and direct observation the origin of tapeworm in man. Although it had been very early conjectured that the cysticercus cellulosæ or the measle of the hog was the embryo of the tænia solium, positive proof was yet lacking, direct experiments had not been made.

Now Von Beneden fed a pig upon the tænia solium from man, and succeeded in this very first attempt; four and a half months afterwards the animal was covered with innumerable measles. Haubner and Leuckart followed with numerous carefully conducted experiments, until not the shadow of a doubt was left as to their absolute success. At the end of the third month after the infection, mature measles were found with fully developed head-pole (cylindre), while in the third week they were hardly of the size of a small pin's head, although upon closer examination, the future vesicular form, as well as the first indication of the later head-pole, could be recognized. After the measle of the pig had been developed from the tapeworm of man, it remained yet to demonstrate by direct experiment the fact that tapeworm in man is generated from the measle of the pig. Several young men, enthusiasts for science, experimented upon themselves by swallowing intentionally measles of the pig, and passed three and four months afterwards fragments of tænia solium. Kuechenmeister experimented twice upon condemned criminals, and found after their execution the developed tænia in their intestines. In his second experiment, he fed the delinquent four months and two and a half months before the execution, each time upon twenty measles, and found after the execution nineteen tæniæ solium in the intestines, eleven of which were five feet long and had ripe eggs, evidently originating from the first import, while the eight others were approaching their maturity and came from the second importation. Thus it had now become an established fact that the tænia solium of man is generated in him from the measle of the pig.

But very lately it has been ascertained that the pig is not the only animal that presents man with tapeworm; cattle, the ox, the cow, the calf, do the same. The suspicion that cattle sometimes must be infected with measles had been roused, since during the last ten or twenty years raw meat had been used for dietetic purposes, and children and adults who had been eating it sometimes became troubled with tapeworm. Furthermore, it was ascertained that in the interior of Africa, where tapeworm is such a common occurrence that neither young nor old, neither high nor low are exempt from it, that even the slave when sold is provided with a bundle of kousso, there was no pork eaten, but only beef, veal and mutton. Travelers as well as the inhabitants of Central Africa considered it a well established fact that tapeworm had its origin in the eating of raw meat. But so far nobody had yet seen measles in cattle, although their existence became highly probable by the above experiences. Whether they were identical with the measle of the pig was unknown as long as they had not been seen and examined, but there were reasons for the supposition that the measles of cattle belonged to another kind of tænia. Goetze already in 1782 had known two different kinds of tænia, one with fat and another with thin joints; and Bremser, of Vienna, in 1819, had observed tapeworms unarmed with hooks, but he thought they had lost their hooks, when old, as man loses his hair,—and physicians and naturalists since repeated the same assertion. Although afterwards the reports from Southern Germany of an unarmed tænia became more numerous, no division into armed and unarmed ones was adopted until Kuechenmeister found upon closer examination so many decided peculiarities of the unarmed tænia, which he named tænia mediocanellata, that a sameness of the two did not seem any longer admissible. Still the independent nature of this tænia had yet to be demonstrated by direct experiment, before it could be recognized. After feeding the pig with the embryos of this tænia had failed to produce measles in it, cattle were chosen for the experiment, the more since Kuechenmeister supposed that his tænia mediocanellata and the tænia of Central Africa were identical.

Leuckart has the merit of having proven beyond all doubt the independent nature of this tænia, by successfully experimenting upon calves, which he had fed with the embryos of the tænia mediocanellata, and from whose muscles he took afterwards the measles unarmed with hooks and with the other peculiarities which characterized them as the progeny of the tænia mediocanellata. Thus it has now become established as a fact that man in our parts lodges two kinds of tænia: the one armed, the tænia solium which comes from the pig, the other unarmed with hooks, tænia mediocanellata, which has its origin from the measle of the cattle,—the latter predominating in the Orient, in Africa, and in Southern and South-eastern Germany, where beef-eating prevails; the former in the northern part of Germany, and where more pork is eaten. About the botryocephalus latus Dr. Knoch, in Petersburgh, has lately made thorough investigations, the results of which he has communicated in Virchow's *Archiv*, bd. xxiv., 3, 4, 1862. Their embryo develops in river water several months after the eggs have passed from the human intestines, and by means of the water enters again the stomach and intestines of man, where he finishes his development into tænia.

Finally, the human body not only develops, and lodges and boards in its bowels the tapeworm, but it is also inhabited by the ***measles*** of the pig. If the eggs of the tænia solium get into the stomach of man, the embryo within them is set free by means of the gastric juice, passes with the contents of the stomach into the small intestines, from whence it begins to migrate into the muscles or organs, in the same manner as in the hog; and thus not only the muscles, but also the lungs, the liver, the heart, nay, even the eye and the brain become infected with measles. The measles of tænia mediocanellata do not develop in man, as far as our present experience goes.

How these eggs can get into the stomach of man will be less a matter of surprise or doubt, if we consider that an individual afflicted with tapeworm may infect himself with measles, if, *e. g.*, by the act of vomiting he forces eggs from his intestines into his stomach; that, furthermore, the ripe, separated joints of the worm have an independent motion of their own, by means of which they creep on damp surfaces like snails, sometimes for several feet, and that they have been seen in the bed-rooms crawling up on the vessels, the beds, and even on the walls, dropping their eggs while moving, which eggs in moist or damp surroundings retain, perhaps, for weeks their germinating power.

The least danger and molestation are caused by measles imbedded in the muscles, the heart excepted. They grow almost imperceptibly, die within a few years, and disappear gradually as they came. Prof. W. Roser, of Marburg, gives us in the *Archiv der Heilkunde*, ii., 4, 1861, a few of his experiences regarding this embedded cysticercus. He says: "The first case of cysticercus that came under my knife was in the lower lip. I took it to be one of those common follicular cysts, and hardly trusted my eyes when, upon opening it, a cysticercus rolled out. Several years ago, a young man came into the Clinique of Marburg, with a small tumor in the midst of his forehead. To suspect it to be fibroid it had grown too rapidly, to be atheroma it was too deeply seated, for a neuroma it was too much immovable. I confessed my ignorance as to its nature. It was a cysticercus. Soon afterwards I saw a similar tumor on the mamma of a woman that I was to engage as a wet nurse. My suspicion that it was a cysticercus became verified by the opening of it. In the tongue I have seen the cysticercus several times. Once I diagnosticated it correctly in the clinique, but I suppose that I also several times overlooked it.

"A round, circumscribed tumor, hard to the touch like a small round fibroid, from the size of a pea to that of a cherry, is shown to you. It is now more, now less deeply seated in the flesh of the tongue, and you exhaust yourself in conjectures as to the nature of this anomalous growth. If you wait, an abscess is formed, and in examining it carefully after opening, you find the dead cysticercus. The diagnosis of the tumor is of course based here upon exclusion. If the size of the tumor corresponds to that of the cysticercus; if there is no inflammatory symptom to indicate abscess; if its rapid growth excludes the idea of a tumor; if its seat—*e. g.*, laterally in the muscular flesh—speaks against the probability of a ranula cyst, the cysticercus suggests itself."

If the cysticercus is lodged in the heart, it causes palpitation and dyspnœa; and where it is in the valves or in the lining membrane of the cavities, even more serious diseases—and death in a case mentioned by Kuechenmeister. The most dangerous place, however, is the eye and the brain. The first discovery of cysticercus in the eye was made about forty years ago by Schott and Soemmering in Frankfort, and caused a great deal of sensation. The worm was lying free in the anterior chamber before the lens, and could distinctly be recognized through the transparent cornea as a movable vesicular being. Since that time these observations have become quite frequent. Alone Graefe in Berlin had, within the perhaps ten years of his eye-clinique, sixty cases, and our Dr. Williams reported, a few years ago, a case to this Academy. Many of Graefe's cases were either at the time, or a short time before the appearance, afflicted with tapeworm. Where the worm is lodged in the anterior chamber, it impairs the sight, but it may be removed by an operation like cataract; but where the parasite has taken lodging in the depth of the eye, as seen by the speculum, it can hardly be removed, causes in the course of time destruction of the inner membranes, and with it irreparable blindness. Vienna oculists had not met with it, because the tænia mediocanellata there prevails.

The existence of the worm in the brain causes vertigo, and dull headache, or weakness of memory and decline of the intellectual faculties unto even complete idiocy, or mania and epilepsy, or even sudden death. Prof. W. Griesinger, in Zurich, in *Archiv d. Heilkunde*, 3, 1862, has collected from medical journals seventy cases of cysticercus in the brain, fifty-four of which were available for classification and the drawing of instructive inferences. These are: 1. Cases without symptoms, five cases; 2. Cases of epilepsy, without intellectual derangement, eight cases; 3. Cases of epilepsy, with psychical disorder, as mania, or vague delirium, or idiocy, six cases; 4. Chronic mental disorders, without epilepsy, twenty cases; 5. Neither mental derangement nor epilepsy, but other symptoms of cerebral irritation or torpor, ten cases.

It is remarkable that there were so few symptoms of paralysis in these fifty-one cases, and that the cysticerci were mostly seated in the periphery, in the gray cortical substance of the brain,—both important facts, having evidently close connection. In the white substance they were found only when the number of the worms was great; but they never existed in the white substance alone, from which Griesinger infers against an active immigration, taking it for granted that they would have stopped in the white substance. He supposes that the embryos wander directly from the stomach through the diaphragm and the pericardium into the left heart or the ascending aorta, and are thus carried to the organs. Paralysis was observed in nine cases; in one of them it was complete and extensive, in the others less complete. In all these nine cases the seat of the cysticercus was such as to concern the basis and the great ganglia; in one case the cyst was very great, which either pressed a deep hole into the external parts of the brain, or it was a complication with a recent process. All these observations indicate that paralysis appears principally with an alteration of the great ganglia. The predominating symptoms are those of irritation of the brain, and these partly of its motory, partly of the psychical portion. In sixteen of these cases complicated with epileptical convulsions, one-half were remarkable for the uncommonly rapid and stormy course which distinguished the epilepsy until death ensued. The same was observed in seven out of the ten cases where epilepsy was complicated with mental derangement. In one case that came under Griesinger's own observation, it appeared to him probable that it was caused by the rapid growth of the vesicles.

Epilepsy by cysticercus gives us instructive instances of true cerebral epilepsy. Like this it follows the law of crossing, where there is a single sided cause; it does not necessarily begin with loss of consciousness,—it can spread from a very limited cramp of an extremity and become general, and may also give warning by an aura. But in one point it varies from true cerebral epilepsy. It is more frequent with advanced age, while cerebral epilepsy is *par excellence* disease of youth, for of these cases but three were under twenty, fifteen between twenty and forty, and twenty-five over forty years. Griesinger gives as opinion, whether the protrusion of the body from the vesicle is, perhaps, the immediate cause of the fits.

Mental disorder existed in twenty-eight cases (fifty per ct.) twenty-two times without epilepsy. The doctrine which Griesinger holds in psychical diseases is hereby confirmed, viz.: that the palpable disturbances which cause mental disorders, are diseases of the surface. The form has nothing characteristic; predominating are states of melancholy, of vague confusedness, with increasing signs of physical debility, with intercurring excitements, frequently accompanied by other cerebral symptoms, as hardness of hearing, debility of sight, squinting, shyness of light, alteration of the pupil, headache, vertigo, sleepiness, anomalous sensations, half-sided pains, muscular tremor, unsteady walk, slight convulsive symptoms, etc. Regarding the number of the cysticerci, in twenty cases, but few (from one to three) vesicular worms were found, three of these without symptoms, and eight had the indefinite and often insignificant symptoms of our last group. Five were epileptic and six mentally deranged, (two of which were also epileptical.) In twenty-eight cases a middle number (from five to sixty) of cysticerci were found in the brain, only two of which were without symptoms, seven belonged to group five, nine were epileptical, thirteen deranged, (three of which were also epileptical.) In eight cases a very great number, sometimes several hundred, cysticerci were found; none of them was without symptoms, only one belonged to group five, two were epileptical, six deranged, (one of them also epileptical.)

ART. II.

Army Surgeons: Their Character and Duties.

An Address to the Medical Society of Gen. Granger's Army Corps. Reported by W. H. MATCHETT, Assistant-Surgeon Fortieth Regiment O.V.I.

BY J. N. BEACH, SURGEON FORTIETH REGIMENT O.V.I.

MR. PRESIDENT AND GENTLEMEN OF THE SOCIETY:

The character of army surgeons has been so misrepresented, and so misunderstood by the public, away from the scene of their labors, that a word from one of their number may be considered an apology for their shortcomings; but, notwithstanding this, I propose briefly to sketch their character as it is understood, and *as it is*.

No reader of the Northern daily papers during the last year can be ignorant of the opinion generally entertained of army surgeons, and of the management of the medical department of the army. Inefficiency, gross carelessness, heartlessness and dissipation are intimately associated in the mind of the Northern public with the medical officers of the army. Doubtless each surgeon has a circle of friends who exonerates him from these charges; but, as a body, this is the character attached to us by our Northern friends.

It may not be uninteresting to inquire, for a moment, what causes have led to this state of public opinion. First among the causes we will place the fact that in our vast armies large numbers die from disease. The public knows that four thousand of our soldiers are buried at Nashville; that ten thousand have found a final resting-place on the banks of the Mississippi; that twenty thousand more have sickened and died in our armies in Virginia; and at every place occupied by our troops the green hillock and narrow board alone tell of some friend who went out from the home circle but recently. Without knowing, or without stopping to consider, if the ratio of deaths be less or greater in our armies than in others, this large mortality is associated in the minds of the public with want of capacity or attention on the part of surgeons.

Another fact is, individual cases in which there has been apparent neglect, and which from want of proper explanation are given as positive evidence of the heartlessness of our profession. As an example, an intimate friend of mine was wounded at Richmond, Ky., and died in hospital at Danville. "He died alone and at night." I know nothing of the circumstances attending his death, only that somebody wrote to his wife that the nurses found him dead in his bed, and nothing can ever eradicate from her mind the belief that he was totally neglected, and that the surgeons and hospital attendants were brutes. A case came under my own observation a few weeks since which, if reported without explanation, would cause the same feelings in the minds of friends as did the case above mentioned. Stopping temporarily at a large hospital in Kentucky, the surgeon invited me, late at night, to see two cases with him, both of whom were in a critical condition. We entered the ward, and stopped at the bedside of patient No. 1. An examination and the opening of a large abscess probably occupied five minutes, and during those five minutes the only two nurses on duty at that time were required in attendance on the surgeon. Immediately after the operation, while the surgeon was absent from the room cleansing his hands, I walked leisurely around the room, and stopped at the bedside of patient No. 2. The man was dead. He had died "alone and at night."

In addition to these and similar cases, distorted facts, are the monstrous fabrications of the newspaper correspondents, which, more than all other causes combined, contribute to the character we sustain at home. It is but charitable to suppose that these gentlemen have some foundation in fact for their statements. It is scarcely credible that they would deliberately manufacture sensational letters of this kind, unless they had a grain of truth to fall back upon. We take it for granted, then, that they do not willfully trifle with a subject so intimately mixed with all the finer feelings of our nature, but that they take one case as a type of the whole. Adopt this rule, and how easily may injustice be done our profession.

I remember distinctly the impression made in a community where I resided, a year since, by the statement of a Cairo letter-writer. The letter was a scathing article on the surgeons and the bad management of the hospitals at some point in the West; and among other statements that left the reader to dream of untold horrors, was one that a "patient in the last agony called the surgeon to him, raised himself in bed, struck the surgeon with all his force, and with a smile of content upon his face sank back and died." This was given as evidence of the feeling engendered by the brutality of surgeons. Now supposing this incident really occurred, which is not at all probable: is it just that the act of a delirious man should be cited as an index of the feelings generally entertained by patients in our hospitals toward their surgeons?

Another cause of this misunderstanding of our *true* character is found in the letters home of a certain class of patients, both in hospitals and out. They are chronic grumblers; disappointed applicants for a discharge or furlough; men who see only the surgeon between them and the accomplishment of their ends. I have very frequently been approached by this class of soldiers, and been told that their "doctors" paid no attention to the sick men; that "they would see a sick man die rather than to discharge him, or let him go home on a sick furlough." How much weight should be given such testimony?

And again: People of the North think they have the evidence of their own senses, and that they can not be mistaken in the fact that army surgeons are careless, indifferent and heartless. A great many visit our large general hospitals, and of course find their sick friends very differently situated from what they would be at home. They find them in large wards, containing perhaps one hundred patients. Of this number, some are reading, some writing, others engaged in cheerful conversation; while, perhaps, the friend so anxiously sought for is dying. The whole scene is so different from anything they ever associated with the sick chamber that they go away with painful impressions. Such, doubtless, would be the feelings of many upon visiting our elegant hospitals in Nashville; and how much more would their sensibilities be shocked could they visit some regimental hospitals, far away from sanitary supplies, and where the hospital supplies of bedding, etc., were insufficient for the proper accommodation of the sick. They would find them in rude bunks filled with straw, their bedding their blankets, and with their knapsacks for their pillows. They would forget that the sick had the benefit of pure air, attentive nurses, and the best food that could be procured for them ; they would forget that the sick themselves were contented ; and would go away with the impression that this was horrible treatment of sick men, and that the surgeon was in some way responsible for it.

Such, gentlemen, I imagine are some of the causes giving rise to the not very enviable reputation we sustain at home.

— Before defining what I take to be the real character of army surgeons, we will inquire what character they might, *a priori*, be expected to sustain. In Ohio, and I believe in nearly all of the States, no physician can receive a commission as surgeon until he has passed a satisfactory examination by a competent board. To be admitted to this examination the applicant must not only have graduated in medicine, but he must bring certificates that he has sustained himself creditably for a certain number of years as a practitioner, and that he is of good moral character. These conditions, if observed,— and I believe they are, as a rule,— offer almost perfect security to the public that no considerable number of army surgeons enter the service inefficient or dissipated. Ought we not to expect from a body of men who enter the army only on the presumption that they are of liberal education, skill in their profession, and of good moral standing in the communities in which they have lived, using industry and a conscientious attention to the responsible duties assigned them ? Most assuredly; and such, I am convinced, is the character we sustain with those acquainted with all the facts connected with our position in the army.

My own term of service in the army extends through the past year. During that time I have been associated with the medical officers of the troops in Eastern Kentucky, those collected at Gallipolis, Ohio, last September, and more recently in Tennessee. And among them all I have met with but one drunken surgeon, and but *few* who were not making use of all the means in their power to prevent disease and restore health. I have visited many hospitals where there was a lack of many things for the comfort of the sick, but none where the surgeons were careless or unkind.

I confess, gentlemen, that when ordered to this department I expected to find disorder and confusion — not from want of capacity or honesty on the part of surgeons, but as a necessary feature of a large army. I expected to find some grounds for the clamor against army surgeons in the want of accommodations for the large number of sick in the Army of the Cumberland. But in this I was disappointed. Instead of finding crowded and poorly furnished hospitals in Nashville, I found them arranged on the most magnificent scale, fitted up with every comfort, and in a style that is thought luxurious by soldiers accustomed to camp-life. During a stay of some days in Nashville I visited many of the hospitals, and for my own satisfaction inquired of the many acquaintances I found there among the patients, how they were treated; and the answer invariably was, "We are treated well; surgeons and nurses are very attentive."

Another grave charge against the surgeon is the using for his own comfort and to gratify his own appetite the delicacies, etc., furnished by friends at home to the sick soldier! This charge is as void of foundation in fact as the charge of drunkenness and brutality, and arises from a want of a correct knowledge of the manner such things are distributed to the sick. Through the agency of the Sanitary Commission these things are distributed to the various general and regimental hospitals, where they are served out to the men as the judgment of the surgeon would direct; the men consume them without knowing where they came from. In after correspondence with their friends the soldier is asked, "Did you get that box of" something? The answer is "No"—when the fact is, he had consumed it, if it was of suitable nature for him in his condition; and if not, he had used of some other soldiers' delicacies, while they had used his. All the potatoes, onions, dried apples, etc., used in this great army at this time, are not from the quartermaster, but from the Sanitary Commission, which is to the sick soldier as the good Samaritan to "him who fell among thieves."

— The *duties* of the army surgeon are so many and various that it is impossible to more than mention them here. The surgeon who only attends to the sick and wounded of his command, and thinks he has done his whole duty, has a very imperfect notion of his obligations.

The first and most important duty of the surgeon is to *prevent* disease: curing it is a secondary matter. The surgeon who prevents disease by a careful study of the causes operating to produce it, and who takes steps to remove these influences, is much more deserving of credit than he who only thinks of curing. In the discharge of this duty it often becomes necessary to change the locality of the camp, to make changes in the cooking and habits of the men, to enforce what seems to them a rigid system of cleanliness of their persons, the tents and entire camp.—and in doing these things we are frequently brought into unpleasant collision with our officers. It is not every military commander that understands the laws of hygiene, or who has the leisure or inclination to study them very carefully; and the number is equally small who do not regard these surgeons who are always making changes and suggestions as troublesome at least. Doubtless every surgeon present has at some time in his experience met with opposition from his commanding officer, or at least had his suggestions treated with an indifference almost insulting to himself. I acknowledge that I do not know exactly where our authority stops, or rather begins, in this matter; but I think I know what our *duty* is,—and that is, never to yield a point that involves the health of the men under our charge.

One word as to our duty to the men themselves, and I am done. There is much in our daily routine of duties, and in our relative position to the men, calculated to make us abrupt in our treatment of them, unless we guard against it. We should treat a sick soldier with the same courtesy, and give the same attention to his complaints, that we would to a sick citizen. In the daily examination of three or four score of men we meet with a few *humbugs* — men who are trying to avoid duty by getting on the sick-list. These old soldiers may be dismissed in a manner the circumstances may seem to require. But the soldier who is sick, or who thinks he is, is deserving of a careful examination that will allow us to prescribe understandingly, and not that hasty disposal of the case that I know I am sometimes guilty of myself, and which must be bitterly felt by a patient whose feelings are at all sensitive.

ARTICLE III.

Case of Jaundice, with Delirium and Death.

BY N. B. WELLS, M.D., LAGRANGE, KY.

On Wednesday evening, April 15th, I was called to see a little girl in this neighborhood, represented as being very ill. On arriving there I found her entirely delirious,—in fact, laboring under what we would now call wild delirium. She was throwing herself into every position of body possible; biting herself in the arms and hands violently, screaming at the top of her voice, and uttering hideous oaths, intermingled with prayers to the Lord Jesus, etc.; and every effort on the part of her friends to quiet and comfort her was repelled as acts from deadly enemies to hurt her. I examined into the case as best I could under the circumstances, and I found on inquiry that she was between eight and nine years of age; that she had always been robust in health, but had always exhibited mental derangement when sick. I also learned she had been complaining of feeling unwell for ten days past, and that her skin and the sclerotica had been jaundiced for that time. She had, however, kept on her feet till that day, when she took to her bed, and simultaneously became delirious. I found on pressure that she suffered pain in the right hypochondriac region, and over the epigastrium and abdomen. She had had no movement of the bowels for twenty-four hours. Her skin was of a deep, dusky yellow color, tinged with green; the tongue covered with a tolerably thick, yellowish white fur, the edges not preternaturally red, and the organ of normal shape. The pupils of the eyes were a good deal dilated under candle-light. The kidneys acted involuntarily and freely, the secretion being of a deep saffron color, and almost thick with sediment. The pulse was 120 per minute, and small and feeble; the extremities rather cool, and no extra heat about the head.

I first had the feet put into a bucket of warm water and well rubbed, and then enveloped in a warm blanket and a hot rock applied to them in bed. I next put out four powders, each consisting of two grains hydrarg. submur., two grains pulv. rhei, and one grain pulv. ipecac,—one to be given every two hours; and I ordered a dose of castor oil to be given in three hours after the last powder should have been given, if the bowels should not be moved by the powders in that time. The abdomen being tympanitic, I also ordered a few drops spirits terebinth to be added to the oil. I then returned home.

Next morning, on my return, I found her resting more composedly, but it was evidently from the exhaustion attendant on her night's tumultuous tossing and screaming. She had only been able to take two of the powders. The bowels had not yet been moved. I ordered another dose of castor oil and turpentine; and also half a pint of warm soapsuds to be thrown into the lower bowel with a syringe, every half hour, till a free alvine discharge shall have been obtained. I also placed a cantharidal plaster over the right hypochondrium, extending over the epigastrium, as well as one to the head,—but in this latter I failed to accomplish anything, as she would not let it remain in place. I also ordered nourishing broths to be given in moderate quantities every hour or two. I left her and returned that evening. She had had several injections, but no result except the passage of some hard black lumps of fæcal matter, impacted in the lower bowel. She was very perceptibly losing ground. She was more quiet, but more stupid ; still she would, now and then, scream out and show signs of pain somewhere. A fine blister had been produced by the cantharides over the region where it was placed ; but no evidence of benefit therefrom was perceptible. I had the efforts at bringing a movement of the bowels by the syringe renewed, and also another dose of the oleum ricini given. I also added to my list of remedies a solution of potas. acetas, to be given so that she should get ten grains of the salt every four hours, that the action of the kidneys might, if possible, be increased. If it had been possible, I should also have resorted to the warm bath at least twice a day ; but this was not possible under the circumstances.

That night, at 11 o'clock, she vomited about a quart of dark, grumous or clotted blood and some vitiated bilious matter ; and soon after had a large discharge from the bowels, black and very vitiated. She then sank rapidly, and died at 1 o'clock in the morning.

No autopsy was had.

This case is remarkable and interesting from the malignancy of the attack, and the rapidity of dissolution; evidently showing that the brain was one of the points upon which the disease spent its force, and more than likely arising in the liver. The emesis of so much blood was more than likely the result of congestion of the portal circle.

Jaundice has been unusually prevalent here this winter.

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Camp Diarrhœa.—Prof. Alonzo Clark reports that in his hands the pernitrate of iron with opium has proved more successful than any other remedy in controlling and ultimately curing army diarrhœa. Opium alone has been " found wanting," and bismuth, soda and nux vomica, cod-liver oil, etc., of no avail. A simple diet has usually been ordered, but a mixed or even promiscuous diet has rarely proved particularly prejudicial. Indeed, in the camps and hospitals it has usually been found that those who have the run of the cooking department soonest recover.

Dr. Clark found Bright's disease a very frequent concomitant of the diarrhœa.

We take the occasion to remark that active astringents are of little real efficacy in the vast majority of these cases. Well chosen, easily digested articles of diet, fresh air, bathing and tonics have succeeded best in our hands. The very elegant preparation of bark and iron (elixir calisayæ ferratrum) advertised by Mr. Sargent, has proved peculiarly efficient and satisfactory.—*Chicago Med. Journal.*

Proceedings of Societies.

Proceedings of the Cincinnati Academy of Medicine.

Reported by W. T. Brown, M.D., Secretary.

HALL OF ACADEMY OF MEDICINE, March 16–23, 1863.

Bromine as a Disinfectant.—Dr. John Davis inquired if any one had had any experience in the use of bromine according to the plan suggested by Dr. Goldsmith, of Louisville. He was trying it, and proposed reporting the results of his experiments.

Dr. J. F. White said he had no personal experience in the use of bromine, but at Nashville he understood they aborted small-pox with it, and even thought the poison of syphilis might be neutralized by it. In the West-End Military Hospital they had used it in gangrene by evaporation, also as a local application; but he could not judge of its effects, as other agents were used at the same time.

Dr. Davis said he used bromine exclusively in a case of erysipelas in the Home of the Friendless. The patient occupied a small room, ten by twelve, and he used up a drachm of bromine by evaporation every twenty hours. The case was a very decided one—the erysipelas spread over the face, head and down the back as far as the middle, but the skin was less thickened along the spine. On the thirteenth day the eruption ceased. In some other cases he used the bromine in conjunction with the mur. tinct. of iron, and the results were much more satisfactory than with bromine alone. He thought bromine was not to be relied on, and he much preferred the treatment by iron.

Dr. Murphy said that Dr. Goldsmith introduced bromine with the idea that it would destroy what produces erysipelas, or renders it contagious; believing that erysipelas depended upon some principle that was contagious, and that the bromine would destroy this. He thought the case reported by Dr. Davis would have got well if nothing had been done, the natural duration of the disease being about fourteen days. He was, however, convinced that the cases of hospital gangrene in the Third-St. Military Hospital were benefitted by the vapor of bromine; the bad odor proceeding from the wounded was put in abeyance. By putting mucus near the vapor of bromine you destroy the pavement cells, and it was reasonable to suppose it has the same effect on the fluid about gangrenous wounds. It destroys the toxæmic matter.

Dr. Davis stated that in regard to the case in the Home of the

Friendless he thought the bromine had done no good. He considered that case a very fair one to test the effects of the agent. The house was completely filled or saturated with the odor of bromine, yet the poisonous air was not corrected or the disease held in abeyance.

Dr. White inquired of Dr. Murphy whether he had ever used the chlorine in similar cases. He thought it worthy of trial. He had used it in the hospital of which he had charge in these cases of gangrene before bromine was introduced, and under its use the wounded were doing well.

Dr. Murphy said chlorine did not have the effect upon the atmosphere which bromine does, neither does iodine, unless it were heated, and he doubted if it would even then. But if one ounce of bromine be put in a gallon of water, allowing the water to become saturated, and then if you pour it in small vessels and place them through the wards, the effect is noticed very soon.

Dr. White said he had yet to learn that it was the odor of bromine that had the good effect in purifying the atmosphere.

Dr. J. B. Smith said he had listened with considerable interest to the discussion, but he had had an experience of fifty cases in the Washington-Park Hospital, and he gave them nothing but iron, beef essence, ale, etc., and they all recovered, the average duration being seven days. He used no such agents as bromine. To some chlorine was applied locally to the wounds. In the first case reported by Dr. Davis he thought the bromine had no effect. Men were brought into the hospital of which he had charge with bad sloughing wounds, but they speedily recovered. Erysipelas had not spread to any extent. He was of the opinion from what he had heard that bromine had no such good effects as had been attributed to it.

Dr. White thought it was not the time to judge of bromine, as it had been used at the same time with other agents.

Endemic Medication.—Dr. E. B. Stevens remarked that, so far as he knew, endemic or hypodermic medication had been resorted to but very little in this city. He had recently had a patient under his charge in the Washington-Park Military Hospital, who was wounded at the battle of Stone River, in the thigh a short distance above the knee. When brought into the hospital, in the latter part of January, the wound was almost healed; but since then he has been nearly all the time subject to most excruciating neuralgic pain in the foot of the wounded limb. All the ordinary local and general treatment in such cases produced no effect; large opiates scarcely afforded the most trifling relief. In consultation with Dr. Norton, they agreed to try hypodermic injection of one grain of sulph. morphia in solution of half a drachm of water. With the first injection there was very decided relief. On the second day the injection was repeated, introducing the fluid into the cellular tissue of the great toe. Following this application there was entire relief to the inside half of the foot, while the outer margin was painful. A third injection between the fourth and small toes gave entire relief to the patient.

Dr. Murphy alluded to a case of hemicrania that he had once before reported to the Academy. He said it was now four months since he was called to see the patient. At first the paroxysms occurred every afternoon at 5 o'clock, and continued until 12. Under the use of quinine the attack was postponed until 10; and by increasing the dose of quinine they were postponed until 12. He also gave him valerianate of zinc, and oxide of zinc; and blistered him. He got better for a time. The paroxysms returning, at the suggestion of Dr. Avery he put him on conium and iron (a formula introduced here from Philadelphia by Dr. Comegys.) He improved on this treatment, but got to having the pain again, when the preparations of zinc were again resorted to, and the saturated tincture of aconite root was applied locally. Two weeks ago he went to some quack down town, who told him the *connection between his stomach and brain was cut off.* He gave him some powders, and he must say he got well.

The Doctor also remarked that Dr. Lawson had been attending some patients with phthisis pulmonalis, at the Spencer House,—one in the third stage of phthisis. This same quack was called. He got the pain down into her stomach; said he would get it into her legs, then it was easy to get it into her feet, and then remove it entirely. But this morning she died.

Fistula in Ano in Phthisis.—Dr. Murphy said he would like at some future meeting to have an expression of opinion by the members in regard to operative proceedings for the cure of fistula in ano in phthisical subjects. He knew of eleven cases: seven were operated upon; in four the operation did not produce fresh granulations, in the other three it did, and the fistulas healed up. Two years ago a man came to him from Indiana, with tuberculosis of his lungs. He put him on one ounce of cod-liver oil and whisky before meals, and one teaspoonful of the hypophosphites, composed of soda, lime, iron, etc., after meals. He improved, but now he returns with a blind fistula in ano. He was at a loss what to do.

[This subject came up for further discussion, and the remarks will be published hereafter.—Eds. L. & O.]

Editorial Translations.

The Action of Cutaneous Revulsives, by Prof. Hebra, of Vienna.

In attacking one of the dogmas of medicine and resolving negatively the question of the therapeutic effects of revulsives in the various diseases of the organism, I am well convinced of the difficulty of the task, and am not ignorant that I am going to excite against me a great part of the medical world. The opinion (the effect of traditional routine with some, the result of empiric conviction with others) which accords to revulsives a utility of the first order, counts a great number of partisans among physicians. As I have the greatest respect for the ideas of each of these parties, I hope for the same liberty, as much more as the opinions which I am about to expose are founded on clinical observation and experience. A question suggests itself at the beginning: By what means have physicians and unprofessional persons arrived at the conviction that cutaneous revulsives may facilitate the cure of internal diseases? Now, it is very probable, and it is important not to lose sight of this point, that the alternation of cutaneous lesions and visceral diseases has been the subject of a wrong interpretation. We see an individual attacked with a disease of the skin,—as, for example, psoriasis,—seized also with a febrile affection. At the time of the invasion of the fever, the morbid manifestations which are located on the integument diminish, and in the last stage of the fever the cutaneous disease disappears. When the patient is cured of his febrile affection, we see the cutaneous disease reappear very soon; we conclude that the retrocession of the cutaneous disease has been the cause of the general affection, which has persisted until nature, coming to the aid of the patient, may reproduce on the external integument the morbid product and reëstablish the primitive condition. In other circumstances it is an inverse evolution which is observed. A febrile state is the precursor of certain cutaneous determinations, and this fever lasts until the eruption has been completely developed (as, for example, in the exanthemata.) In the same order of diseases the exanthem only develops as the progress of the affection is favorable. If, on the contrary, the progress is not good, the eruption becomes pale by degrees, and then, disappearing when death takes place, is no longer appreciable on the body. Here we have the same faulty reasoning and the same erroneous conclusion. Physicians and unprofessional people agree in regarding the retrocession or untimely metastasis of the exanthem the cause of the fatal termination of the disease. Every impartial observer could easily convince himself in all cases of the emptiness of such a conclusion. It will always be observed that the disappearance of the cutaneous lesion has not preceded the febrile affection, and that, on the contrary, the chronic cutaneous disease does not begin to recede until after a longer or shorter duration of the fever. There is, on the other hand, a well known fact, that in all general diseases at all long or intense in their course, in order to produce a certain degree of anæmia, the skin is the first organ which discloses by its pallor this commencing hyperæmia. Strong in this incontestable principle, the observer will understand without any trouble why the cutaneous diseases, which are characterized now by redness, become pale gradually, and then disappear when any general morbid process of a certain gravity occurs.

I refer for more ample details on this point to the complete exposition that I have made in the *Traité de Pathologie et de Thérapie de Virchow,* (*Maladies de la peau,* vol. iii., 1re liv., p. 50, *Anæmia Cutænia,*) and I remember only that a slight morbid state, as syncope, is sufficient to cause those cutaneous lesions to become suddenly pale, which declare themselves with redness, and this color reappears with its primitive brilliancy as soon as the syncope is overcome. I must still observe, before going further, another theory not less erroneous than the preceding, and which has not certainly been without influence on the generalization of cutaneous revulsives. This theory, besides, is far from being new. Originating in the most remote antiquity, it has come down through the middle ages, and counts now a great number of adherents. According to this theory, the disease is regarded as a material being which establishes itself in the human organism, either on one point or another. The only object of the physician is to expel this dangerous guest. The denominations assigned by Galenism to the morbid essences, phlegm, blood, yellow bile, black bile, the ideas of Sylvius, of Paracelsus, of Mercurialis on the *acretes* (*acrimoniæ sanguineæ*) and the acids of the blood, are the vestiges, doubtless, of these theories. We find them none the less elaborated in the works of the physicians of the middle ages, who believed that they had found in their *Materia Peccans* the source of all the diseases, and provoked their expulsion with great disturbance through the intestines, the kidneys and the skin. The theory of fluxion, as formulated by Beaume, has demonstrated in our day that these same ideas, revised and augmented, still exist in the medical mind. At present, the progress made in all branches of natural sciences has opened other ways by which the loyal observer may advance without fear toward the knowledge of diseases, and yet practitioners do not perceive that in pleading the cause of cutaneous revulsives they do not show that they are entirely freed from the prejudices of their predecessors in not following the correct course of pure and of simple observation.

I believe it to be strictly conformable to the rational laws of observation in laying down this indisputable proposition : In any disease whatever, we are unable to speak with any certainty of the effect of a remedy until we are in possession of the two following conditions—the knowledge of the modifications which the therapentical agent causes in the healthy or diseased organism, and the understanding of the natural progress of the disease left entirely to itself from its beginning to its termination. This fruitful idea dates back to the seventeenth century. Already at that time Gideon Harvei, (*Ars Curandi Morbos Expectatione,* Amsterdam, 1695) preceding his time, wrote without reflection that the best of all prescriptions, on the occurrence of a new disease, is contained in this one word: *exspecta.* Such a conclusion, however, appeared very inhuman, so long as there was a conviction that it is in the power of the physician to diminish, notably, the progress of diseases, and especially of febrile affections; but since Hahnneman has taught the treatment of typhus and pneumonia, pericarditis and peritonitis, and all the series of diseases in *ite* which menace our existence ; since the inventor of this medication by decillionths has obtained, thanks to it, as much success as the Hippocratic medicine with its colossal apparatus of cuppings and bleedings, of leeches and sinapisms, of revulsives by cantharides or tartar emetic, every conscientious and reflective physician has found it to be his first duty to solve the following question : Have infinitesimals really the virtue of curing those formidable diseases, or rather are these affections susceptible of a happy termination when left to themselves?

Penetrated by this last truth, a great number of physicians and *cliniciens* of our time have followed with success the cure of divers general affections, febrile and apyretic, by the expectant method, and have thus studied the natural progress of the disease. Now, if these physicians have succeeded in curing typhus, pneumonia, pericarditis and peritonitis, etc., by the employment of distilled waters of various colors, or by simple paregoric and insignificant drinks, as marshmallow, barley, etc., if they have had as much success as their *confrères* armed with all their remedies, who proceed constantly escorted by lancets, leeches, sinapisms, blisters, emetics, corrosive sublimate, calomel, etc., it is not difficult really to conclude from this comparison that the treatment *lege artis*, conducted according to the purest Hippocratic principles, was not an indispensable necessity. It is not difficult to see that the cure was brought about *in spite* of the administration of these heroic means, and that nature, to bring to a good end her work of preservation, has realized once more the truth of this sentence: *Natura et morbum et medicum vincit.*

A very remarkable fact is, that those physicians even who are convinced of the power of expectation in grave affections, which I named above, can not prevent themselves from making exceptions in favor of cutaneous revulsives in certain diseases of a mysterious nature, of which the only name is synonymous. (I agree with them for an energetic and rapid treatment.) I refer to rheumatism. In exciting in this disease the peripheric nervous system, it is believed that a favorable influence is exercised on the state of the deeper seated parts, as the sheaths and nervous tissue, muscles, tendons, ligaments, etc.—in fine, all the tissues in which it is believed the disease localizes itself. How often the practitioner is forced to recognize his want of power after having successively tried, in his fruitless efforts, the whole apparatus of barbarous medicine (*medicina crudelis,*) commencing with the simplest rubefacients, and progressing gradually to the terrible moxa. In face of the significant results of this experience, physicians do not, however, renounce their warlike arms, because they have sometimes seen cases of rheumatism cured during the employment of cutaneous irritants. They hasten to conclude that their patient has been cured by their therapeutics, while they ought to admit that he has been cured during the employment, and in spite of the employment, of this revulsive medication. When we determine with exactness how many cases of rheumatism have been cured *absque ulto tractamine*, how many have been cured by homœopathy, hydropathy, electricity, magnetism, how many have owed their cure to plasters of all kinds, the statistical report would not certainly be to the disadvantage of these latter. Practitioners will reply, perhaps, that it is very necessary to do something, that we must prescribe for the poor patient tortured by the pain a treatment which may lead him to hope for a relief from his pains, and that, in cases of this kind, the employment of light revulsives as sinapisms are indicated, since these means do not present any inconvenience.

I intend to show further on the bad effects of these revulsives, and to note the indelible marks which they leave on the skin, and I will prove that even in those conditions which have been named, the employment of these agents is formally contraindicated. Is it desirable to do something to tranquilize the patient, there is no want of indifferent means. Why then have immediate recourse to epispastics and rubefacients? What useful purpose do warm or cold applications serve? What purpose do lotions, frictions and inert plasters fulfill? They procure for the patient the same satisfaction, without altering the surface of the integuments.

Let us look at another branch of medical practice. We see the habitual treatment of ocular phlegmasia and we find the same routine in every ophthalmia : leeches to the temples, blisters to the nuchæ or behind the ears, cauteries to the arm, foot-baths, sinapisms,—this is the cortege of remedies which must dissipate ocular hyperæmia, prevent or moderate exudative action. Every impartial physician, and there is no need to be an oculist for this, may convince himself how sterile this method is, how dangerous it is in a great number of cases. When it is observed attentively, it will be seen that all this paraphernalia does not succeed in moderating the accidents. In face even of all, the inflammation advances, and like all other inflammations, it progresses until it may have attained its culminating point; then only it takes a retrograde course. In other circumstances, various forms of ophthalmia will be seen to attain the desired cure, either by the expectant method, or by "sympathy," or even despite the most vicious treatment. Fortunately for the happiness of humanity and the honor of science, many ophthalmologists have protested against this blind routine treatment, and not only do not any longer advocate cutaneous revulsives, but they condemn them absolutely in all diseases of the eyes. We regret that, in the presence of such high declarations, revulsives still find leading advocates both among physicians and the unprofessional.

If we leave the clinical side of this question in order to look at the experimental, we will still find facts presenting themselves against the therapeutic employment of cutaneous revulsives. It may be a patient who has a patch of *eczema rubrum* (consequently, arid surface, infiltrated and moist), and we try to cure it by applying irritants to the neighborhood of this efflorescence which have the power of developing a similar eruption. On one of the sides of the eczematous patches, at the distance of about two inches, we place a blister of the size of a thaler, opposite a sinapism, and on the two opposite sides we apply tartar emetic ointment and croton oil. I have repeated this experiment several times, and can tell what happens. In all the points exposed to the artificial irritation, redness and vesicles are produced, and pustules and bullæ ; but these heroic remedies are vainly insisted on, for the central eczema will be in no way modified. Far from this, if employment of these agents is persisted in, the natural eczematous surface extends and involves the entire surface which has been rashly irritated. In place of the expected cure, a diseased surface four times larger has been produced. If, then, I can not displace my central patch and bring it to the surface, when I acted on a single organ, the skin, with means the effect of which is a lesion of the same order, how can I hope that an irritant placed on the integument is capable of successfully overcoming lesions of the pleura, lungs, peritoneum, brain, eyes, etc. ? In what miraculous way, under the influence of revulsives, will the morbid products deposited in the viscera, or in the cavities which conceal them, be eliminated ? Does any one think by chance to determine on the integument precious metastasis, to relieve the most important organs in this way ? This is an idea which will not be admitted by any physician capable of observing.

Some *confrère* will perhaps be astonished at all this discussion, and will seek the cause of this crusade which I pursue against revulsives. Perhaps, without attributing to them a real value, he will sustain that in a practical view they are of the first necessity ; that, if they are without utility, they are at least without inconvenience, and that the physician in having them at hand is very happy, was it only that *ut aliquid fecisse*. Reduced in this way, the proposition can not even be accepted. It is not sufficient to say that revulsives can not be useful : there is another truth which must be fully presented. These agents produce veritable injuries, and I do not speak only of persistent lesions and immediate dangers.

Let us examine a little more carefully this part of our subject. It is a well known fact that in eruptive fevers, variola, rubeola, scarlatina, the danger is proportioned to the intensity of the eruption. Experience teaches also that the efflorescence reaches its maximum on those points where a lesion of the skin already exists, as, for example, an eczema, or rather in those regions which undergo permanent pressure, and become in consequence the seat of chronic hyperæmia, as, for example, at the points where the garters press. If we apply a sinapism on the chest of a patient suffering with the premonitory symptoms of variola to relieve a dyspnœa, the place where the sinapism was applied will be the seat of a more abundant eruption than any other part. It is very probable that if we could, in a case of this kind, cover the entire cutaneous surface with some convenient revulsive, we would transform a mild case of variola into a grave one. We very well know who would pay the expenses of this treatment. The physician who irritates inconsiderately the healthy skin of a patient affected with chronic eczema, even by the continued employment of cold water, according to hydropathic treatment, will obtain as a first result the generalization of the disease on the whole extent of the skin, and there will be nothing for him to do but to suspend immediately his treatment, under the penalty of aggravating permanently the condition of the patient entrusted to him. The same remark holds good for the treatment of itch. If a physician does not know when to stop the use of means for the destruction of the parasites, if he does not know where, when and how they ought to be used, he will certainly not cure any one of the disease, or more, he will only reach a cure after having covered his patient with a terrible eczema. Such examples were by no means rare at the time when fumigations with sulphur were used. The practitioner who imagines that, in all the diseases of the skin, he can not employ too many warm baths, has often a very sad experience, for not only he does not succeed, with his warm water, in curing the cutaneous lesion, but he works directly for its increase. But what must we think of that one who, in the treatment of acute or chronic hydrocephalus, covers the head of a poor child with tartar emetic ointment? Most assuredly, he will not cause the hydrocephalus to disappear in this way, which resists such treatment, but he will succeed wonderfully in producing a pustular eruption extremely painful, which might, circumstances favoring, give rise to an erysipelas or a purulent infection. A blister applied behind the ear is very often the origin of an eczema which spreads slowly over the ear, the face and scalp, and this artificial disease, if it is not judiciously treated, may impose on the patient several years of suffering. I have seen such cases in great number, and the ocular affection did not, in the least, abate its ravages. Leeches applied to the temples do not leave after their use, when every thing goes on well, but white and triangular cicatrices, which certainly do not contribute to the embellishment of the face; but there are unfortunate cases, and then the suppuration of the bites may cause a loss of substance that a cicatrice strongly marked could alone complete.

I omit any reference to a stubborn hæmorrhage. I have not yet said anything of the advantages of scarified cups. On the other hand, I have often had occasion to see the cicatrices which they produced, and to observe the disgraceful effects on the neck, the arm and the legs. It is useless to add that the inconvenience is the most serious with women. The exutories applied to the arm to combat recurring ocular inflammations, to determine blood from the head, or to lessen various cutaneous eruptions, never accomplish the end in view ; but they inconvenience the unfortunate patient who suffers from them all his life, and are productive of eczemas, which, spreading from a common centre, propagate themselves by irradiation for several inches, and sometimes cover the entire member. A sinapism applied on the chest or nuchæ leaves an ineffaceable pigmentary stain, and certainly does not increase the beauty of young women. There will remain the indelible vestige of a useless revulsive which has amounted to nothing in the cure of the disease. She is perfectly right in thinking that she would not have been dead if the revulsive had been omitted, and that finally she owes to it a permanent outrage to her beauty. A cutaneous irritant of a certain intensity may become a cause of death, if it is employed improperly in a person of bad constitution. What physician has not seen with his own eyes that patients attacked with typhus, pneumonia and variola are seized with cutaneous diphtheria on all parts which have been submitted to artificial irritation—to vesication, for example ? This false membrane, at first white, then of a deeper color, hard, spread out on the surface, is very adherent to the subjacent parts. It is only in very rare cases that it is eliminated by consecutive suppuration, and very often this intercurrent affection becomes the cause of a fatal termination.

One word on another cutaneous irritant whose employment is general, viz. : the tincture of arnica. According to the precepts of the homœopathists, who introduced this medicament into medical practice, it ought to be employed in a state of extreme dilution, (a few drops in several pounds of cold water,) in contusions, wounds, etc. The physician who uses tincture of arnica prepared in this way has nothing to fear, and is very sure of doing no harm ; but if, according to the custom of the majority of physicians and surgeons, we employ the pure tincture of arnica very slightly diluted, we will regret very soon the bad effects which it produces. In persons not very sensitive, we see at the expiration of some hours redness and tumefaction. In those in whom the integument is more sensitive, eczematous vesicles appear which are not localized on the point irritated, but extend beyond it, and sometimes in their progressive irradiations invade the whole cutaneous surface. This eczema of a new kind persists for months, and the state of the patient is much more uncomfortable in all respects than if he had allowed the first disease to take its own course. These artificial cutaneous diseases, which consist the oftenest in vesicles, bullæ, or pustules, become frequently the beginning of veritable diseases of the skin, and are very far from disappearing when we discontinue the use of the irritant which produced them, persisting weeks, months and years. It is impossible, then, to distinguish these artificial lesions from eczema, pemphigus, ecthyma or pathological impetigo.

A very singular fact is that, according to the ordinary theory of the action of revulsives, these vesicles, bullæ and pustules ought to be the best preventive to internal diseases, and that this beneficent action ought to increase with the extent of the efflorescence itself. But experience comes in, indifferent to theories, teaching us that generalized exudative cutaneous diseases not only do not exercise any protective influence against visceral diseases, but that they have, on the contrary, an extremely bad effect on the general constitution, and may thus become a cause of death. If the theory of revulsion was established, we could not conceive of an individual more perfectly healthy than the man affected with general chronic pemphigus, for certainly the doors of exit are not wanting to the *peccant matter*; it is now several centuries since Lazarus was regarded as a complete assemblage of all diseases, and he found it necessary to have the intervention of a superior power to cure him.

A happy revolution has been accomplished in the last few years in veterinary medicine. Every one knows with what ardor and cruelty the whole apparatus of the revulsive method has been applied in the treatment of the diseases of horses. From the persevering efforts of the professors of our Veterinary School, this medication is no longer in use; and as good results are obtained at present by pure and simple expectation as formerly by a treatment akin to torture. This is, then, a precious example given by the veterinary physicians to us, and we must hope that all will slowly decide to follow it. The means of arriving at this desirable result is very simple: let each physician when he is about to prescribe a revulsive ask this question, If he was the patient would he be treated thus? I have not seen a great many physicians who have applied cauteries, moxas and setons to themselves. The physician should never forget at the bedside of the patient this fundamental precept: "Do not do to others that which you would not wish done to you." And he should meditate some time when, at the end of his resources, he is on the point of having recourse to revulsives. He ought always to remember that his first obligation was to quiet pain; but he ought not to forget that when he can not succeed, his only consolation is in not having caused any useless suffering.

Correspondence.

Letter from Boston, Massachusetts.

Messrs. Editors :—I resume to-day the consideration of the reports of our State institutions for 1862.

Lunatic Hospital at Taunton.—This institution was opened in 1854. The reports of the Trustees and of the Superintendent, D. Choate, are full of valuable information. Since 1854, not less than 2,048 patients have been admitted ; within the same time 1627 have been discharged as recovered, improved or died. In the past year the admissions have been 208 : recovered, 87,—44 males, 43 females ; improved, 12,—six of each sex ; unimproved, 51 ; deaths, 43,—nine less than the year previous. The ratio of cures to admissions was 42.59, while for the nine years it was 36 per cent. The ratio of recoveries to the whole number of discharges, for the year, was 58 per cent. The character of insanity in those admitted was—for mania, 103, melancholia, 28, dementia, 77, while there were none for monomania ; 77 recovered of mania, and 16 of melancholia. About one-third of all the cases admitted the past year had been insane more than one year. Sixteen per cent. of all the recoveries which have taken place the last four years have been in cases which had been insane less than three months before admission ; eight per cent. between three and six months ; seven per cent. between six and twelve months,—making an aggregate of over ninety per cent. of all recoveries occurring in cases where the lunacy was less than a year's duration. Since the opening of the institution, 54 per cent. of the inmates have been of American birth, 37 per cent. were born in Ireland, 3½ per cent. in Germany, and 2½ per cent. in England.

The report is quite elaborate in statistical tables ; and its pages are occupied with a discussion of the nature of insanity, and the improvements which science and humanity have made in the last half-century for the treatment of this unfortunate class of persons.

McLean Asylum, Somerville.—From Dr. Tyler's interesting report it appears that 270 persons (127 males and 143 females) have received the aids of the institution for the year. The average number of patients in the house has been 190 ; remaining at the end of the year, 176,—78 males, 98 females. During the year 82 were admitted,—40 males and 42 females ; in the same time 49 males and 45 females were discharged; of these, 39 were "recovered," (18 males and 21 females,) 14 were "much improved," (7 of each sex,) 13 were "improved," (7 males and 6 females,) 6 males and 4 females were "not improved," and 11 males and seven females "died." No sickness of an acute type has prevailed. An edifice "for the accommodation of the most demonstrative forms of mental disorder" has been erected, and the area of the pleasure-grounds has been so enlarged that ample walks and drives are afforded for the benefit of the invalids. Dr. Tyler thinks, with others, that the war so far, instead of being a fruitful cause of insanity, may have acted as a prevention. He discusses at length insanity in its incipient stages, and its curability if early treated. This excellent report shows that the institution is in a prosperous condition; and it closes with an appropriate eulogy of Dr. Luther V. Bell, who for nearly twenty years so faithfully filled the office of superintendent, and who died in the service of his country.

Massachusetts General Hospital.—The annual report of Dr. Shaw, the resident physician, shows that 1611 patients were admitted during the year 1862. During this period 843 were discharged well; 152 much relieved; 279 relieved; 77 not relieved; 138 not treated; 101 died; 16 eloped; remaining, 145,—79 males, 66 females. Proportion of deaths to the whole number of results, 6.3 per cent.; 271 patients were admitted on account of accidents; 45 per cent. of the deaths were among medical patients, and 55 per cent. among surgical; 277 applicants were refused admission. These were cases unsuitable for treatment in the Institution. The capacity of the hospital is equivalent to 180 beds. The average number accommodated was 134,—71 males, 63 females. The average time of paying patients was 2.1 weeks, and that of free patients 4.3 weeks; 27 per cent. of the free patients were female domestics; 14 per cent. were laborers, and 14 per cent. were mechanics. The largest number in the house at any one time was 166. Of the number admitted, 436 paid in full or part, and 1175 were free.

The report of Dr. Samuel L. Abbot, Physician to "Out-Patients," shows that there were 4975 applicants,—2095 males, 2880 females. Of these 3487 were medical cases and 1488 surgical; 1954 were Americans and 3021 foreigners. Of the whole number 4800 were treated and furnished with medicine and surgical appliances. The cost of maintaining the hospital during the year was $42,11481.

Rainsford Island Hospital.—The report of this institution in Boston Harbor, presents the condition of the hospital up to Oct. 1, 1862, to be very satisfactory. At the beginning of the year, there were 165 patients. Admitted during the year, 494; discharged, 462; died, 70,—leaving 127. There has been a diminution in the number of patients, owing to the influence of military bounties and pay in increasing the income of many families, supplying them with better food and clothing for the preservation of health. Only 20 cases of delirium tremens were treated against 41 the year previous, which is owing to the removal of so many restless men from civil life by the war. My space will not allow of any extended notice of this report.

The annual meeting of the Boston Society of Natural History was held last evening. This Society is erecting a new building at an expense of about $100,000. It will be elegantly fitted up, and will be an ornament to the city.

The following officers were chosen for the ensuing year: President, Jeffries Wyman, M.D.; Vice-Presidents, Charles T. Jackson, M.D., A. A. Gould, M.D.; Corresponding Secretary, Samuel L. Abbot, M.D.; Recording Secretary, Samuel H. Scudder; Treasurer, Thomas T. Bouve; Librarian, Chas. K. Dillaway; Curators, Thos. T. Bouve, of Geology; William T. Brigham, Mineralogy; Charles J. Sprague, Botany; Thomas M. Brewer, M.D., Zoölogy; Henry Bryant, M.D., Ornithology; F. W. Putnam, Ichthyology; Theodore Lyman, Radiata; J. C. White, M.D., Comparative Anatomy; Samuel H. Scudder, Entomology; B. J. Jeffries, M.D., Microscopy; F. H. Brown, M.D., Herpetology; Charles Pickering, M.D., Ethnology; Cabinet Keeper, Charles Stodder.

An association was formed some eight years ago in this city, for the erection of model lodging-houses. The experiment has been quite flattering in regard to the comfort of the families, and the immunity from sickness.

The contributions for the benefit of the Sanitary Commission, both in this State and other New England States, have been very large, and are still pouring in from the generous hands of a loyal people.

B.

MILAN, OHIO, May, 1863.

MESSRS EDITORS:—At the quarterly meeting of the Delamater Medical Association of Norwalk and vicinity, held at Milan, on the 8th of April, the following paper was read respecting the decease of one of our number, and by vote of the Association a copy was requested for publication in the *Lancet and Observer*.

In compliance with that request I hereby forward the same for publication in your journal, if it meets with your approbation.

—The war has made large drafts on the medical profession, as well as on those who were liable to do military duty, and now fill the volunteer ranks of the army. And while I have not the statistics before me, yet I will venture the assertion that no class of men or profession, proportionally, have more readily responded to our country's call for help in her "impending crisis" than have the medical profession of Ohio. Of the members of this body, nine have been doing good service in the army, quite one-half of our reliable, working number. Only one, in the good providence of God, has, as yet, fallen at his post, viz.: Dr. W. F. Dean, of this place.

Feeling in common with us all that this is a cruel, unnatural war, he volunteered his services, leaving the family circle and all the endearments of a pleasant home, to serve his imperilled country in her day of darkness and thick gloom. I think it highly proper, therefore, that we should pay the following tribute to our late associate and brother, not more for the patriotism thus displayed than for his social virtues, his standing as a man and a physician. Of his personal history I have obtained the following data:

William Franklin Dean was born in Vermont in the year 1817. In childhood he removed with his parents to St. Lawrence Co., N. Y., and much of his earlier life was spent in Ogdensburgh, where he studied medicine with Dr. Socrates Sherman, of that place. After obtaining his degree, and practicing medicine for a short time without a permanent location, he came to Milan in 1844. Here he continued in the practice of his profession till the latter part of May, 1862.

Often, during the previous fall and winter, while talking with him of our national condition and prospects, did he feelingly speak of our country's need, the imperative call for more surgeons, especially from Ohio. Pursuant to the urgency of this call and a fixed determination not to shrink from sharing in this toil and danger, he presented himself before the State Board of Medical Examiners in the fall of 1861, passed a satisfactory examination and was commissioned Surgeon of O.V.I. by Gov. Tod. Soliciting a post where active service was required, he requested that he might either be assigned to a regiment or battery. Inasmuch as neither of those places were then vacant, he was willing, temporarily, to occupy any other post the Surgeon-General might designate. Winter passed away without his receiving an appointment. Spring was nearly gone, and still he had not been ordered to report for duty.

Anterior to the period in question, a most desperately fought battle had taken place in the South-West. Medical men were in special demand at this time, to look after our needy soldiers in that quarter. Keenly alive to the sufferings consequent on such a battle as the one referred to, coupled with an extra call for surgical assistance, his sensitive nature would not allow so urgent a demand to pass unheeded. Hence he visited Columbus to see if he could not be placed in some position where his services might be needed. Although appointed surgeon, he felt that the responsibilities of that station were great, particularly to one inexperienced in army practice, and hence asked for the post of Assistant-Surgeon, till his lack should be in some measure supplied. Consequently, he was ordered by Surgeon-General Weber to report in that capacity to a battery then at or near Pittsburg Landing, with instructions, if the exigencies of the case required it, to accompany a hospital boat back to Cincinnati. Following these instructions he visited that locality, anxious to render all the aid in his power for the relief of suffering humanity. On his arrival there he visited the battle-field, and though nearly two months had elapsed since the deadly conflict at Shiloh, the sight even then was sickening in the extreme. Half-buried men and dead horses lying on the field where killed, in the June atmosphere of that section, together with filthy and stagnant water, combined to produce a stench almost intolerable. Causes like the foregoing led him to believe that a repetition of his visits to that locality, particularly during the summer months, must be unhealthy in the extreme. Predisposed to biliary derangement and frequent attacks of intermittent fever, should his health fail from undue exposure, his services would be utterly lost to the Government. But placed in a more salubrious clime, he felt that there was a more reasonable prospect of his being able to render continued and valuable aid to the country. Hence, as the battery in question was not there, and it was deemed necessary that he should accompany the steamer loaded with sick and wounded soldiers to Cincinnati, on his arrival there, at his own request, he was detailed for hospital duty in Western Virginia. However, this service was designed to be but temporary. Wishing, after a few weeks labor in this field, to be engaged more actively—such being the fulfillment of his cherished desire in entering the army, as well as an implied or promised post, rather, by the Governor, when a fitting opportunity occurred—he was now appointed Surgeon of the Twenty-Fifth Regiment, O.V.I. Before joining his regiment, he was permitted to make a hurried visit to his family.

On the 18th of August he started for Washington, and left Alexandria three days after in search of his regiment, being at that time engaged in the disastrous and hotly-contested battles on the Rappahannock. Reaching the Rappahannock on the evening of the 21st, and being satisfied that amid the bustle and confusion incident to battles and retreats, all efforts to find the Twenty-Fifth would be utterly futile—and being desirous of losing no time in making himself useful—he, on the 22d, came across a Brigade-Surgeon, of whom he sought counsel. Complimenting him for his desire to do something, and inasmuch as Gen. Pope's headquarters were at some distance from there, hence the difficulty of finding the Medical Director, he advised him to remain at the depot, and attend to the wounded as well as he could.

Soon after this he was called for by the Medical Director, and put in charge of his hospital ambulances. His time was fully occupied in this way till the 26th, at which time he received orders to join his regiment, then said to be at Sulphur Springs. But on arriving at the Junction, he learned that it was at Warrenton, whither he proceeded with all possible dispatch, reaching it that evening. He remained with his regiment for the next five days. Facts incidentally noted in his diary show a great lack of edibles. From this cause and the great exposure necessarily endured, together with the incessant and exhaustive labors that followed, unaccustomed as he was to such privations and hardships, the over-tasked constitution finally yielded. He was attacked with fever of the typhoid type, and was sent to the Seminary Hospital at Georgetown, D. C. Fear and hope alternated respecting his recovery. But a day before his death a letter was received from an acquaintance and friend of the family, dated four days before that event, the tenor of which led them to feel more hopeful. And when the news of his death came the next day after the reception of the letter alluded to, just five weeks after leaving home, it found us quite unprepared for the sad announcement, impressing upon our minds in no ordinary degree the truthfulness and meaning of that trite saying, "in the midst of life we are in death."

Thus died Dr. Dean, trusting in God, on the 22d of September, 1862, aged 45, at the above named hospital. His remains were embalmed and sent home, and interred in our cemetery on the 28th of said month. He leaves a wife and six children to mourn his loss.

The crowded church at the funeral obsequies afford the most striking evidence of the esteem in which he was held by this community. Thus has passed away one who always aimed to meet with us. By this event we ought to be admonished and learn this lesson—"Whatsoever thy hand findeth to do, do it with thy might; for there is no work, nor device, nor knowledge, nor wisdom, in the grave, whither thou goest."

—The following resolutions were passed by our association, and ordered to be entered on our minutes.

"*Resolved*, That this Association, while mourning the loss of one of its most esteemed and active members, Dr. W. F. Dean, takes pleasure in remembering and recording his amiability in private and social life, his industry and success in the cultivation of medical science, and his worth as a man and a Christian.

"*Resolved*, That the cause of our country's Union and Liberty has become doubly dear to us, and the action of Southern rebels and traitors doubly hateful by reason of the sacrifice of this most dear and valuable life on the altar of patriotism."

L. Galpin, M.D.

Reviews and Notices.

On Diseases of the Skin: By Erasmus Wilson, F.R.S. Fifth American from the Fifth and Revised London Edition, with plates and illustrations on wood. Philadelphia: Blanchard & Lea. 1863.

There is no subject so much neglected and shirked by the body of the medical profession as cutaneous affections. And when we reflect that this department of medicine embraces every form of pathological change which takes place in the external surface tissues of the body, we are ready to realize that it is amongst the most important branches of professional study, and yet what a wonderfully small proportion of physicians are able to distinguish clearly and exactly the various forms of skin disease, after you have, perhaps, excepted the more common, as measles and chicken pox and the like. Quite a variety of reasons combine to explain this well known defect in the profession. Our opportunities for comparison are perhaps not very abundant; there is doubtless still a great lack of exactness in the classifications adopted by our most prominent authorities, and beyond all perhaps we have simply come to dread the whole subject and avoid its careful study from an instinctive repugnance.

With such a state of knowledge and prejudice, such a work as the one before us is a most capital and acceptable help. Mr. Wilson has long been held as high authority in this department of medicine, and his book on diseases of the skin has long been regarded as one of the best text-books extant on the subject. The present edition is carefully prepared, and brought up in its revision to the present time. In this edition we have also included the beautiful series of plates illustrative of the text, and in the last edition published separately. There are twenty of these plates, nearly all of them colored to nature, and exhibiting with great fidelity the various groups of diseases treated of in the body of the work. These plates also embrace those prepared by Mr. Wilson to illustrate his work on "*Constitutional Syphilis and Syphilitic Eruptions.*" The present edition has made the consideration of venereal skin affections a more prominent topic than heretofore, and hence the propriety of including these additional plates.

Considering all things, we do not think we have anything more complete than this work of Mr. Wilson. We therefore heartily commend it to our readers as a text-book in cutaneous medicine. We might, perhaps, do an acceptable service by giving a synopsis of this book, but to do so would require us to give the entire table of contents. We will only say, therefore, that it covers the whole ground, and its classification is perhaps as good and clear as that of any authority on the subject—perhaps the best.

For sale by Robert Clarke & Co. Price for this edition, embracing the colored plates, $7.50.

Clinical Lectures on the Diseases of Women and Children: By GUNNING S. BEDFORD, A.M., M.D. Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics in the University of New York. Author of the "Principles and Practice of Obstetrics." "*Medicus curat morbos, natura sanat.*"—*Hippocrates.* Eighth edition. New York: William Wood & Co. 1863.

The first edition of this work was issued from the press in June, 1855, and, as will be seen by the title above given, we have now before us the eighth. As has been heretofore stated in this journal, the author has received the very flattering compliment of having his book translated in French and German.

As these rapidly succeeding editions have issued from the press, we believe each issue has been more or less fully noticed in this department of the *Lancet and Observer.* There is, therefore, but little necessity or propriety in our making any extended notice at this time. Indeed, the mere fact just stated that the professional demand has called for such frequent editions sufficiently declares the merit and attractions of the book.

To such of our readers as perchance are not already familiar with the character of this work, we will briefly say that in 1850 Dr. Bedford established an *Obstetric Clinic* in connection with his chair in the University of New York, and the clinical lectures as reported at the time are in this form collected into book shape and presented to the reader. Hence we have repeated for us the Obstetric Clinic of the distinguished Professor, placed in permanent shape; and hence, too, we have the same want of system as in the original lectures, being the same irregularity in which the cases were presented to his class. Indeed, we think this book of Prof. Bedford has now reached an age, and met with a degree of reception from the profession, which would warrant an entire revision and re-arrangement by its author. We suggest, then, that in a subsequent edition the book be arranged with regard to topics, and thus while it should still retain its peculiar style and characteristics of a clinical work, at the same time become for the reader a more systematic work on diseases of women, the various cases and lectures being grouped in the order they properly belong.

In the present edition the author has added a lecture on Carcinoma of the Uterus, which is a clear and valuable *resumé* of the whole subject.

We can, in conclusion, but do as we have heretofore done so heartily and cordially, commend this book to our readers as a most attractive and useful work; and we are sure every one who buys it on this recommendation will thank us for the advice.

For sale by Robert Clarke & Co. Price $2.00.

A Theoretical and Practical Treatise on Midwifery: Including the Diseases of Pregnancy and Parturition, and the Attentions Required by the Child from Birth to the Period of Weaning. By P. CAZEAUX, Member of the Imperial Academy of Medicine; Adjunct Professor in the Faculty of Medicine of Paris, etc., etc., etc. Adopted by the Superior Council of Public Instruction, and placed by ministerial decision in the rank of the classical works designed for the use of midwife students in the Maternity Hospital of Paris, *Third American*, translated from the Sixth French Edition, by WM. R. BULLOCK, M.D., with one hundred and forty illustrations. Philadelphia: Lindsay & Blakiston. 1863.

M. Cazeaux stands justly as amongst the first obstetric authorities of France, and the volume before us is a magnificent monument to his genius, research and industry. Cazeaux's Midwifery, although perhaps not a familiar text-book with the American profession, is nevertheless well known to well informed obstetric students, the present being the third American from the sixth French edition.

The American translator, Dr. Bullock, of Wilmington, Delaware, in his brief preface says that he finds many additions have been made throughout the work, "besides an article on the important subject of turning by external manipulation." We have naturally turned to the article thus especially indicated, and with a feeling of curiosity certainly, have read the very careful, and we must say interesting chapter on version by external manipulation; but we fail to find in it anything practical or useful. We are very sure most readers will regard the whole idea of correcting any irregular or defective presentation by external manipulation, either previous to or during labor, as at best but a fanciful suggestion of a fanciful people.

The usual arrangement or order of treating the various topics embraced in the range of midwifery teaching is for the most part followed by Cazeaux in the volume before us, but a very superficial examination exhibits how thorough and exhaustive he is in his manner of treating his subjects. He is particularly satisfactory in the anatomy and physiology of structures, and the illustrations accompanying are very excellent. The plate showing the fœtal circulation especially is very beautiful and well delineated.

Part VI. is devoted to the "Hygiene of Children from Birth to the Period of Weaning." It is a most important and valuable portion of the work, embracing articles on the whole matter of nursing and weaning, the mother's diet, when she is fit to nurse and when she becomes unfit, of mixed diet for the child, and of artificial nursing, together with clothing, sleep, exercise, etc., etc. M. Cazeaux agrees with universal experience as to the extreme difficulty of raising infants by an artificial diet, especially in large cities where the atmosphere is bad, and where it is such a difficult matter to procure pure milk; but he considers cows' milk variously diluted and moderately sweetened as the best substitute for the mother's, if a substitute must be made. So we all say; and yet how hard it is to get this beat into the heads of mothers, some form of pap, or gum, or starch mixtures being supposed so much more nourishing and every way more suitable for an infant than plain cows' milk.

In the form of an appendix we find an article on the use of anæsthetics in obstetrical practice. We observe that it is chiefly a *resumé* of the views and experience of Prof. Simpson, of Edinburgh, and therefore, as might naturally be expected, is favorable to their use.

The whole work is able, and practitioners and students will find it a most valuable and safe book of reference. As such we honestly commend it to our readers.

The publishers have done their part well. We open up the large, clear-printed pages with a vast deal of satisfaction, and altogether the printing, the paper, the illustrations are capital, and the price is placed at a figure within the reach of all.

For sale by Robert Clarke & Co. Price $4.50.

Medical Student's Vade Mecum: A Compendium of Anatomy, Physiology,
emistry, Poisons, Materia Medica, Pharmacy, Surgery, Obstetrics, Prac-
e of Medicine, Diseases of the Skin, etc., etc. By GEORGE MENDENHALL,
.D., Prof. of Obstetrics and Diseases of Women and Children in the Med-
l College of Ohio, Member of the American Medical Association, etc., etc.
venth edition, revised and enlarged, with two hundred and twenty-four
ustrations. Philadelphia: Lindsay & Blakiston. 1868.

r. Mendenhall's unpretending little book has firmly established
f in the good will of the profession, and for its kind we know of
vade mecum so well arranged. It is comprehensive, and at the
e time brief. The student, especially, will find it a very conven-
manual for reference when he simply seeks for a fact or a point
out wishing any full study of the subject. We are gratified to
the appreciation which this work has received, thus calling for a
edition a seventh time. We have so often had occasion to com-
d this book to our readers, and it is so familiar to medical men,
we do not deem it necessary to repeat what we have so often said
re.

or sale by Robert Clarke & Co. Price $2.00.

Editor's Table.

☞ The office of the *Lancet & Observer* is removed to 319 Elm Street, be-
n Ninth and Court. This point is convenient of access to strangers in the
; and it will afford us pleasure to see any of our friends, or the friends of
journal, at our new office.

ular No. 6.

SURGEON-GENERAL'S OFFICE, Washington, D. C., May 4, 1863.

. From the reports of Medical Inspectors and the Sanitary reports
his office, it appears that the administration of calomel has so fre-
tly been pushed to excess by military surgeons as to call for
mpt steps by this office to correct this abuse; an abuse the melan-
ly effects of which, as officially reported, have exhibited themselves
only in innumerable cases of profuse salivation, but in the not in-
uent occurrence of mercurial gangrene.

seeming impossible in any other manner to properly restrict the
of this powerful agent, it is directed that it be struck from the
ly-table, and that no further requisitions for this medicine be ap-
ved by Medical Directors. This is done with the more confidence,
modern pathology has proved the impropriety of the use of mercury
ery many of those diseases in which it was formerly unfailingly
ministered.

II. The records of this office having conclusively proved that diseases prevalent in the army may be treated as efficiently without tartar emetic as therewith, and the fact of its remaining upon the supply-table being a tacit invitation to its use, tartar-emetic is also struck from the supply-table of the army.

No doubt can exist that more harm has resulted from the misuse of both these agents in the treatment of disease, than benefit from their proper administration.

W. A. HAMMOND, Surgeon-General.

When the present Surgeon-General took charge of the medical bureau of the army, great satisfaction was expressed in some quarters. We felt at the time that great injustice was done to the medical staff of the regular army in his appointment. We knew some half-dozen men in the army who had served faithfully and honestly, and who were every way competent, who should have been promoted. We have never yet understood the reasons for the removal of the late Dr. Findley, unless it was that he could not be used by a certain class of men banded together partly for patriotic and philanthropic purposes, and partly for selfish ends. A cry was made, however, against Dr. Findley, and he was disgracefully removed by the Secretary of War, and Dr. W. A. Hammond appointed. He has had a very difficult office to fill. No other man has had so many difficulties to overcome, and of no other man has so many exactions been made. He entered on the duties of his office with advantages seldom possessed. His reputation for scientific attainments was of a high order, recognized by the leading men in the profession throughout the country. He was appointed to gratify an opinion and a prejudice of a number of gentlemen in New York, several of whom are laymen. The opinion was boldly stated to the President and Secretary of War that there was not one man in the regular army qualified for the office of Surgeon-General, and hence, on looking around, Dr. Hammond was selected for his high order of abilities and scientific attainments. He has had the support of the profession and the medical journals, and then, too, he has had the advice and support of the Sanitary Commission. He has done many things which have not met either the expectations or the approbation of the profession. Indeed, we know that in private medical circles many men of high position have spoken in terms of the strongest censure of his official acts.

Yet no word of disapproval, nor voice protesting against anything he had done, has been uttered in an official way by any medical society, or in any one of the medical journals. Every medical man has had a full appreciation of the difficulties appertaining to the duties of the Surgeon-General, and have therefore kept silent, believing it almost impossible for any man to administer the medical affairs of so large an army without committing some errors.

In the face, however, of the above Circular (No. 6), we believe it not only inexpedient, but wrong, to keep silent any longer. Dr. Hammond has taken just one step too many. We shall not at present undertake to decide whether he intended to insult every medical man in the profession, but that he has done so, the above Circular sufficiently proves. That he has grossly insulted every army-surgeon, many of whom are his superiors, and that he has taken advantage of his official position to play the medical despot to the military surgeons, and thus outrage the liberal and philosophical spirit of a progressive science and advancing profession, no one can deny or gainsay. Of course the military surgeons have a padlock on their mouths, with the key in the hands of Dr. Hammond. To protest against anything he may do by a military surgeon is to be cashiered. So far, then, as the military surgeons are concerned, Dr. H. may consider himself safe from protest and criticism ; but from the profession in civil life, which he has so unjustly outraged, we opine he will hear some protestations and censures, which, if we are not greatly mistaken, will eventuate in causing his removal from office.

And now let us look critically at this Circular. He says, "that from the reports of Medical Inspectors and the Sanitary reports," he has learned "that the administration of calomel has so frequently been pushed to excess by military surgeons as to call for prompt steps by this office to correct this abuse." We pronounce the evidence on which he gained his information false and unreliable. We do so for many reasons. We have been present in the military hospitals in this city when the Medical Inspectors have made their visits, and have never heard them make a single inquiry as to the use or abuse of calomel. The same remark is true of the Inspectors of the Sanitary Commission. The surgeons of several military hospitals have assured us that none of these Inspectors have said one word concerning calomel. We were once present when the *distinguished* Inspector-General of the army walked through a military hospital. He scarcely opened his mouth once, and busied himself in his walk of some fifteen minutes in making some notes in a little book, and then took his departure. We have also been present when several Medical Inspectors have made their visits, and have not heard a single inquiry made as to the use of either calomel or tartar emetic. Now we ask, are the reports of these two classes of Inspectors to be relied on? Judging by their inspections here, is it fair to say that any reports made by them should receive credence?

But, still further, we say that the statements of the Circular in regard to the abuses are false, for the reason that in the hospitals in this city it has been rare to see a case of ptyalism. In two military hospitals of this city, into which over five thousand sick soldiers have been admitted in the last eighteen months, but a single case of ptyalism has been admitted, and not a single case has occurred in either hospital from treatment. We have assisted in removing the sick and wounded from seven or eight hospital steamers direct from Fort Donelson, Paducah, Shiloh and Nashville, and have not seen a single case of either ptyalism or mercurial gangrene. Military surgeons who have served in Western Virginia, in Kentucky and with the armies in the South and West, have assured us that the occurrence of either salivation or gangrene has not been witnessed by them. At the meeting of the Medical Profession on the 30th of May, a letter was read from a surgeon in charge of a large hospital in Louisville, in which he stated that during the last eighteen months he had not seen a single case of salivation or mercurial gangrene. Still further, we know that in the military hospitals in this city and vicinity, calomel and tartar emetic have scarcely been used. Tonics and stimulants have been the remedies indicated and largely ordered.

But let us admit that the Surgeon-General has reliable evidence of the abuse of two remedies, is it any justification for the order? Every sensible and well-educated physician will answer, No. He may with as much propriety issue an order against opium, alcoholic stimulants, quinine and surgical operations. No one will deny that all of these remedies are abused, and if he orders his Inspectors to investigate, we have no doubt but that they will find surgeons in the army who have abused each and all of them. To be consistent, the Surgeon-General should make the investigation, and if we are correct, issue Circular No. 7, forbidding their use.

The consistency of this Surgeon-General is wonderful, and his sense of justice and respect are amazing. Think of his issuing this Circular No. 6, while he has and still permits every surgeon to have a full supply of instruments. We here venture to say that if abuses have occurred in the army, they have followed the indiscriminate use of the knife, and yet not one word in reprehension of the use of surgical instruments has the Surgeon-General uttered. We beg our readers to note well that no mention is made of the opinions of the Medical Directors on this subject, who have been in charge of the various armies. It is fair to presume that he never deigned to ask the opinions of such men as Tripler, Letterman, Murray, Swift, Wirtz and Perin, all of whom are well educated surgeons of many years service in the army, and all of whom are now or have been recently Directors of the different armies. Why is it that no reference is made to the evidence on the use of calomel and tartar emetic of the many able surgeons of volunteers who have been acting as Directors of Divisions? Why, we ask, did not the Surgeon-General send a Circular to every hospital surgeon and to every regiment, demanding the number of cases of ptyalism and mercurial gangrene, before he issued his Circular? He has issued dozens of orders to hospital surgeons in regard to information on other points, to make omission in this matter singular, if not suspicious. He has given more attention to the reports of his Medical and Sanitary Inspectors than to the regular army surgeons, from whom he should have sought his facts.

Another very remarkable fact which our readers will be astonished to know is, that these Sanitary reports which have induced the Surgeon General to issue so infamous an order were prepared by men chiefly taken from Massachusetts. From the printed report No. 56 to the Sanitary Commission, by Henry G. Clark, M.D., Inspector-in-chief, we find the following passage: "The larger part of the Inspectors, thus far, have been drawn from Massachusetts, because they were more accessible, better known, and therefore more available to me in a work so comparatively new." If the Surgeon-General really desired the facts, why is it that he has received reports on a matter affecting the whole profession, from a set of men living in the same section. It looks bad in itself. It looks as if this Surgeon-General had allied himself with the charlatans of the day in their cry against the use of calomel. It looks still more as if he had prejudices against the use of the remedy, and has only waited for an opportunity to exercise a power which accident and injustice had given him.

We think we have shown that the statement that "innumerable cases of profuse salivation" have been seen, is totally false; and we now direct our attention to another statement.

"This is done," says the Circular, "with the more confidence as modern pathology has proved the impropriety of the use of mercury in very many of those diseases in which it was formerly unfailingly administered." Admitting all this to be true, what remedy is to be used in those diseases in which calomel is used, and on which modern pathology has not yet spoken? What is the military surgeon to do? Answer, most wise and exalted Surgeon-General! A gentleman fresh from the school in which the Surgeon-General so lately taught medicine, enters the army, and proposes to treat those diseases in which calomel is recommended, and on which modern pathology has not spoken, has nothing to do but let the disease run its course and wait until the Surgeon-General shall issue another order! What nonsense, what charlatanry to come from the Surgeon-General of the Army of the United States!

It is something really refreshing to find a man with no more clinical or pathological experience than the Surgeon-General setting himself up at this day as judge to tell the profession what is the present pathology. Who is Dr. W. A. Hammond, that he should arrogate to himself the privilege and authority only granted to a great master. Has he by long years of bedside study of disease in a large hospital entitled himself to tell the profession what is modern pathology and what remedies shall be used? Has he, like Rokitansky or Bennett, made long and careful studies in pathological anatomy to entitle him to lay down the principles of true pathology? Has he made careful and minute studies of remedies? If so, we can find no record of them.

The cool impudence of the Surgeon-General surpasses anything we have witnessed for many a long day, and is only like the talk and pretentions of the bold quacks representing the various *isms* of the day. In our blissful ignorance, we have been happy in believing that Gross, Wood, Meigs, Bedford, Stillé, Flint and Miller, and many others, knew something of internal and external pathology, until this Circular from the Surgeon-General reached us. There is but one thing more to be done for the Surgeon-General to have his name go down to distant ages as the great, bright light of this century: to issue an order closing all the medical colleges and have all the recent works burned by the common hangman, and then establish a medical college in Washington City, making himself Professor of Hygiene and Pathology, and fill the other chairs with his Medical and Sanitary Inspectors.

In another point of view this Circular is a greater outrage on the profession. It is a proof strong as Holy Writ to the people, that there is in the army no surgeon capable of administering calomel properly. If, then, there is so much ignorance in regard to the use of two remedies, is it not fair to say that the same ignorance exists in regard to all remedies? The Surgeon-General has taken up the charge of quacks and the prejudice of the ignorant, that certain remedies are very dangerous and certain ones very innocent. With quacks it is common to hear, "If my remedy does no good, it will do no harm;

I give no mineral medicines." Our Surgeon-General has acted on this. With his advanced pathology he has forgotten that remedies are relative agents, and that every agent, be it ever so simple, is potent for harm when improperly administered.

The Surgeon-General has inflicted a grievous wrong upon his profession,—a wrong under which we do not believe it will rest quietly. He has assumed to himself a power as a scientific man totally untenable, unbecoming, and unworthy of one of his attainments; and disgraceful in any man with so limited experience, and absolutely disgraceful to the distinguished office he holds. He must either recall Circular No. 6, or he must resign,—the smallest atonement he can make to an insulted and outraged profession.

We but express the feeling and opinion of the profession in this city, in what we have said. Our readers will be able to understand the sentiment of the profession from the proceedings of a meeting which we publish in this number. We much mistake the profession all over the West if it does not rise up and give the Surgeon-General a rebuke from which he will not soon recover. We would advise every surgeon in the army to resign, did not patriotism and the brave and suffering soldiers forbid. We believe the American Medical Association will speak out in such words as will reach the Surgeon-General. Let every medical society, and if there is no medical society, let every lover of his profession, every lover of scientific progress and of the broad, liberal spirit of legitimate medicine, rise up and protest against Circular No. 6.

In connection with this whole matter we give the proceedings of a large and respectable meeting of the medical profession of this city, held in the Medical College of Ohio, May 30th.

A meeting of the Regular Medical Profession of Cincinnati convened pursuant to call in the lecture-room of the Medical College of Ohio, Wednesday morning, May 27th, to consider the late Circular No. 6 of the Surgeon-General of the United States in reference to the use of calomel and tartar emetic. Dr. L. M. Lawson was called to the chair, and Dr. W. B. Davis was elected Secretary. On motion, Drs. Comegys, Graham, and Dodge were appointed a committee to report the sense of the profession of this city, and the meeting adjourned to meet on Saturday, 30th May.

At the adjourned meeting, there was present a large gathering of the profession, and a full and hearty expression of opinion was given by many of the gentlemen present, endorsing the spirit of the following report, which was read by the Committee, and unanimously adopted:

The Medical Profession of the city of Cincinnati have seen with amazement the recent Circular No. 6 of W. A. HAMMOND, Surgeon-General of the U. S. Army, in which it is stated that the reports of Medical Inspectors of the army and Sanitary reports have presented to his notice that by the use of calomel *innumerable* cases of profuse salivation and frequently cases of mercurial gangrene have occurred; and as it has seemed to him impossible to restrain the use of this powerful agent otherwise, he has directed that it be struck from the "supply table," and ordered a disapproval of all future requisitions by the Medical Directors of the army corps; and the same general order also says, that as the experience of the army shows that prevalent diseases are as well treated with other remedies as with tartar emetic, he further directs that, in order that there shall be no further tacit invitation to its use, it shall also be stricken from the "supply table."

This Circular of the Surgeon-General declares a condition of ignorance and malpractice in the Medical Profession of our country which has only hitherto been asserted by those charlatans who habitually seek popular favor by denouncing well-known remedies employed by the Regular Profession; and we feel called upon to denounce his statements as utterly false and utterly unsustained by the reports of the Army and Sanitary Inspectors, to which he refers; on the contrary, we have authentic testimony that this condemnation of mercury and antimony is a foregone conclusion openly expressed by the Surgeon-General three years since, while on duty at Mackinaw as an Assistant-Surgeon of the army.

The Medical Profession here have had an opportunity to observe in the military hospitals of this city and vicinity the condition of about twenty-five thousand cases of sick and wounded soldiers, and a careful examination of the records show that not more than nine cases of ordinary salivation have existed; and not one case of mercurial gangrene has been seen, showing conclusively that here, at least, the statements of the Surgeon-General are statistically false, and presumably can not be sustained by Inspectors' reports anywhere, as we have had sick and wounded from nearly every Department in the West.

It is well known that among the most pernicious and deadly drugs are those obtained from the vegetable kingdom, and so far as the argument of the Surgeon-General is concerned, these, too, should have been condemned, lest "their presence on the 'supply-table' might be regarded as a tacit invitation to their use."

The characteristics of all so-called systems of medicine as Homœopathic, Hydropathic, Eclectic, Botanic, etc., is their restrictiveness, while the regular Medical Profession is characterized by its broad spirit of liberality, permitting its practitioners to select their remedial agents from every department of nature, taking as their guide the light furnished by the wisest and best men of every age and every country.

The Surgeon-General is attempting to play the autocrat in medicine. Intoxicated by the bad eminence to which he has attained over the heads of a large class of distinguished regular army-surgeons, not by extraordinary scientific attainments, not by years of successful practice in his profession; but mainly by an influential clique, he assumes to himself to control the intelligence, experience and liberties of those over whom he has been placed; but we know that in these assumptions he has mistaken his rights and his powers, and that enlightened medical men will never submit to his dictation.

In conclusion, the civil and military medical men of this city assure the people of the West and the nation, that so far as they can judge from an extended observation on battle-fields, in camps and in hospitals, the statements of the Surgeon-General are utterly false and unfounded, and we will add, that from facts within our knowledge in regard to his administration, we believe him to be alike unfaithful to the soldier and to the sacred trusts committed to his hand by the Government. Therefore,

Resolved, That the removal of W. A. HAMMOND from his position as Surgeon-General would meet the approbation of the profession, be of advantage to our soldiers, and creditable to the Government.

Resolved, That these proceedings be published.

Pending the consideration of the report, several medical gentlemen gave their observations in different portions of our army and in General Hospitals.

Dr. C. MUSCROFT said : "I have been in the service eighteen months, in Western Virginia, Kentucky and Tennessee, and have seen no cases of salivation or any abuse of mercury; a part of the time I have acted as Medical Director of a divison of the army."

Dr. G. C. BLACKMAN said : "I have seen as many hospitals and as many battle-fields as any man in the army. I was a long time Medical Director of General Mitchell's Division; was two months at General McClellan's headquarters on the Peninsula, inspected General Franklin's Division ; yet saw nor heard of any mercurial salivation or gangrene."

Dr. MENDENHALL stated that he had recently inspected for the United States Sanitary Commission the hospitals at Washington and field-hospitals of the army of the Potomac, and, although his attention was directed to the effects of mercury as a remedy, yet he neither saw nor heard of any cases of salivation.

Drs. JUDKINS and COMEGYS, who had acted as Sanitary Inspectors for New York city and vicinity, saw no cases of salivation or gangrene.

Dr. SEXTON, who had been over a year in the army of Western Virginia, had known of no abuses of the remedy.

Letters from Louisville, and other information, corroborated the above statements.

L. M. LAWSON, M.D., *Chairman.*

W. B. DAVIS, M.D., *Secretary.*

Death of Dr. Hartmann.—Just as we are working off those last pages of our journal, we find the following paragraph in the *Medical Times* : "SURGEON HARTMANN, of the One Hundred and Seventh O.V., was shot through the bowels at Chancellorsville, and died of peritonitis." This is the melancholy end of a personal friend, and one of the most indefatigable workers in the profession. For several years he was a colaborator on this journal, preparing for us the very complete and accurate abstracts that for a long time constituted one of the most attractive features of the *Lancet and Observer*. Last year he decided that it was his duty to enter the medical service of the army, and we were compelled reluctantly to separate from his monthly companionship. We at that time hoped it would be but temporarily, and that when smiling peace returned again, we should have the pleasure of welcoming him back to our readers and our pages.

Another worthy Surgeon has offered up the tribute of his life as a part of the sacrifice we are called to make in the terrible strife we are passing through. All honor to the memory of Dr. CHARLES A. HARTMANN!

The Indiana State Society—Convened at Indianapolis on Tuesday, the 19th May ult. We regret that in the multiplicity of our cares we omitted to notice this meeting in our last issue; we owe our Indiana friends an apology, and trust they will accept it. Thus far we have received no notice of the transactions. We were unable to make our usual visit to this meeting, but hoped some member in attendance would have furnished us with an abstract of the proceedings.

Ohio State Medical Society.—We are gratified to learn that there will probably be an unusually large attendance at the meeting of the State Society on the 16th, at the White Sulphur Springs. Let every one that can come up early, bring his family, and make his calculation to remain long enough to have a good visit and a good time. Several of the railroads have already agreed to make a half-fare arrangement for those attending the meeting; that is, to those paying one way, the Secretary's certificate will return them free. Physicians residing on the line of the Pittsburg, Columbus & Cincinnati railroad should apply to the Auditor's office at Steubenville, and on payment one way they will receive a return pass.

New Books.—It will be seen by reference to our review department that medical book publishing is again becoming active. Several new works, or new editions of old ones, are just presented to the trade. We are pleased to observe this revival of activity in this direction.

Obituary.—Dr. Samuel A. Cartwright died near Jackson, Miss., on the 2nd of May, aged 72 years. Dr. Cartwright had a high reputation throughout the country, and especially the Southwest, as a medical and scientific man. He was a large contributor to medical journals, and also obtained considerable notoriety by articles contributed to *DeBow's Review* and other periodicals, in which he advanced singular views respecting the origin of races and kindred topics.

—— Dr. John Moore, Surgeon U.S.A. and formerly Director of hospitals in this city, and late Director of a Division of the Army of the Potomac, has been ordered to take charge of Gen. Grant's army as Medical Director. This is an excellent appointment.

An Army Board for the examination of Assistant-Surgeons in the regular service convenes in this city on the 1st inst. Surgeon John T. Carpenter is President of the Board.

LITERARY EXCHANGES.—The *Atlantic Monthly*—Boston: Ticknor & Fields. $3.00 a year. The June number is before us, and opens with an article on "Weak Lungs, and How to make them Strong," by Dr. Dio Lewis; and we must say that we rarely see a medical topic popularized to so good purpose. Dr. Lewis is a full believer in the curability of consumption, and an ardent believer in the doctrine that the large percentage of pulmonary affections ought tó be, and might be reduced. For instance, if the percentage of phthisis be very materially made up by errors in dress, the inhalation of impure air with its dust and noxious gases, exposure to moisture, and faults of climate, why, very rationally these are all circumstances that may be placed under surveillance and control; and when so placed, by so much consumption is robbed of a corresponding share of its victims. The article is readable to the popular taste, and will be relished by the professional man likewise. Such articles suggest thought and are useful. The *Atlantic* we regard as the most scholarlike periodical in America. Its contributions are most highly and carefully prepared, and are from the pens of our strongest literary and scientific men. To such as love something now and then of a lighter vein we commend the reading in this same June number of the "Member from Foxden." The July number forthcoming will contain contributions from Hawthorne, Dr. Holmes, Robert Dale Owen, Prof. Agassiz, etc., etc., and is the opening number of a new volume.

Godey's Lady's Book.—Philadelphia: L. A. Godey. $3.00 a year. The June number closes up the first half of the year, and July begins a new volume. It continues to present for the ladies the newest patterns, styles, together with all manner of fancy and needle work, cottages, etc., etc. The reading is of a kind fit for any family circle. L. A. Godey is a veteran in editorial service, this being the thirty-third year of the publication of the *Lady's Book.* No wonder that he has learned to please his fair friends.

Harper's Monthly for June is on our table. It begins a new volume. It fully sustains its ancient reputation, being of its kind unsurpassed. The single opening article in the present number, being an account of the Indian massacres and war of 1862, with illustrations, is well worth a year's subscription. But everybody knows what *Harper* is and what it is like, and it scarcely needs our feeble praise. For sale by all booksellers at $3.00 a year.

The Philosophy of Suicide.—The analogy between suicidal and homicidal mania has been much dwelt on in the consideration of recent cases. The opinion of Dr. Forbes Winslow has been quoted in support of the proposition that a suicidal act is, in every instance, indicative of insanity. Those who closely study the writings of this eminent authority will be satisfied that he abstains from so dogmatic a conclusion. Fifteen years have elapsed since Dr. Winslow exhausted the discussion of this question in his celebrated work "The Anatomy of Suicide," and then arrived at conclusions which the profession entirely and the Legislature has since acted on. Dr. Winslow argued that the presumption should be, in the absence of clear evidence to the contrary, that no person with a mind altogether free from disorder, or an intellect in a normal condition of equilibrium, would, in opposition to one of the strongest instincts implanted in human nature,—viz., the principle of self-preservation,—voluntarily destroy himself. In all medico-legal inquiries, Dr. Winslow is of opinion that the unhappy suicide should have the benefit of the presumption of insanity, and particularly so if it can be established that he was apparently driven to the act by severe mental distress caused by remorse, domestic bereavement, loss of friends or property. Cases do undoubtedly occur—and Dr. Winslow by no means ignores them—in which no appreciable trace of mental derangement can be detected previously to the fatal act of self-immolation. But even in these anomalous instances, he suggests whether the attempt upon life might not safely be viewed as the first overt act of a mind in a morbid state; in other words, a crisis of a preëxisting condition of obscure and undetected insanity. Apart from a strictly medico-legal view of the subject, Dr. Winslow asks whether this is not the charitable construction of the *vexata quæstio.* It is in practice the principle regulating the determinations of Coroners' Courts in all cases of suicide. This fact is clearly established by the extreme rarity in modern times of a verdict of *felo-de-se.* Twenty years have passed since Dr. Winslow, by his evidence on the trial of M'Naughten, caused the Judge to suggest to Sir Wm. Follet the abandonment of the criminal prosecution. Dr. Winslow's opinions, and the result of the case, led to a parliamentary discussion of the question of insanity, and the enunciation of the opinions of the fifteen Judges. It is of the first importance that the views of distinguished living authorities should neither be misquoted nor misunderstood. What Dr. Winslow's conclusion may be, should the Crown direct his examination of the prisoners under sentence of death, it is not for us to anticipate; but of one thing we are satisfied, that it will be based on purely medical and scientific grounds, and that no mistaken notions of pity will influence a judgment which can call to its aid all the resources of extraordinary experience.—*London Lancet.*

Transparent Paper.—It occasionally happens that it is desirable to copy sketches, diagrams, etc., a task which, trivial as it may appear to, an expert, is a serious enough one to those not skilled in the art. It is well to know that benzine, applied by a sponge over the paper used for tracing the design, will render it temporarily transparent, so that all that is necessary for the copyist to do is to follow the markings on the original with pencil or India ink as desired. The benzine will speedily evaporate, leaving the paper as before opaque. The odor of the benzine will disappear in a few hours. Ordinary tracing paper, rendered transparent by oils, does not give by any means so distinct a result, neither can it be so readily colored, if coloring be desired. The benzine process was discovered by Prof. Oelschlager.—*Chicago Med. Journal.*

Parisian Medical Intelligence.

M. Velpeau, a few days ago, delivered a clinical lecture at the Charité, having for subject the ultimate effects produced on the movements of a limb by a permanent luxation of one of its joints. The locomotive power, this surgeon maintains, is very much recovered by the injured limb at the expiration of a longer or shorter period. The particular case which served as text for his observations, was that of a young man admitted for a contusion of the side, in whom there existed an old unreduced luxation of the left shoulder. All the characteristic signs of this lesion were present: the subacromial depression, the shortening of the arm, the tension of the deltoid muscle, and the presence, beneath the collar-bone, of a hard, round substance, the head of the humerus. The patient stated that this condition had existed for ten years, and was caused by direct violence—viz., a fall from the top of a cart. When transported after the accident to Beanjohn, four successive attempts at reduction were made by the late M. Robert, without success; and similar endeavors were repeated, on two occasions, by M. Malgaigne with a like result. These failures M. Velpeau attributes either to the entanglement of the luxated head of the bone in the fibres of the subscapularis, or to a fracture or displacement of the glenoid cavity itself. As M. Velpeau further remarks, the danger attending the employment of very forcible measures for reduction is considerable. The rupture of the axillary artery, paralysis, emphysema, etc., may, and do, follow the use of great extensive efforts, and should be carefully weighed by the surgeon as possible contingencies. On the other hand, if the luxation be left to itself, what happens?

M. Velpeau's attention was drawn to the subject for the first time in 1831. During that year he amputated the leg of a patient at the Pitie. This man died, and as he presented an old unreduced luxation of the shoulder-joint, M. Velpeau carefully examined the articulation. This patient had entirely, or nearly so, recovered the movements of the injured limb. On dissection, the concave surface of the glenoid cavity was found flattened, shelving inwards, and altogether transformed, so as to be unfit for the reception of the head of the bone—which last had adapted itself to its new position, in which it functioned as in a hinge-joint. Consequently, M. Velpeau having, since the above-mentioned period, witnessed many instances of old luxation in which a useful amount of movement has been regained, is averse to the plan of attempting reduction in cases of long-standing dislocation.

An interesting trial regarding a supposed case of child-murder which occurred some weeks ago at Chartres, has given rise to an animated correspondence between a M. Devaureix, counsel for the defendant, and M. Pajot, the celebrated accoucheur. The case was briefly this :—The dead body of a female child was found in a cellar, and two experts, Drs. Barbon and Anthoine, were named to examine into the causes of death. The results of their investigation were that the child had been born alive, and had breathed, and that death had been caused by asphyxia, occasioned by violence exerted on the head. In the subsequent interrogation, M. Barbon declared that, in his opinion, the child had been seized by the legs or body, and had been repeatedly dashed on the floor. M. Anthoine, on the other hand, maintained that the injuries to the head had been caused by violent compression by the hands of the murderer. The accused, the mother of the child, denied all knowledge of the crime attributed to her, and accounted for the death of the infant by saying that the labor had been so sudden as to occasion the fall of the child on the ground. M. Devaureix, the advocate, in pleading his client's cause, dwelt forcibly and at length upon the discrepancy of the expert testimony, quoted largely from Baudelocque, Dubois, Mauriceau, Charries, La Chapelle, etc., and so bespattered and bewildered the court with his mock medicine, that he gained his suit. Not content with one success, he must needs risk another, and a second time enter the medical lists, challenging M. Pajot to break a lance upon the new ground he had so boldly entered. (M. Pajot had in the interim expressed his opinion as to the probabilities of the cause of death.) M. Devaureix's letter to the celebrated obstetrician is given at length in the *Gazette des Hôpitaux*, and contains a hodge-podge of medicine, law and sentiment—the lätter in nauseating doses.

The reply of M. Pajot has, luckily for the client of the Chartres Demosthenes, appeared a "day after the fair" one's acquittal, else the enlightened jury might possibly have seen the matter in another point of view. After setting right some dozen or so of the lawyer's blunders, he adds, "If I, sir, a professor of obstetrics, had to plead on a point of law, I should not fail to consult all the authors who had written on the subject; and if I had the happiness to be gifted with powers of oratory equal to yours, I might, before an incompetent jury, also gain my cause. But you and your brethren who heard me would not fail to smile at the few good solid heresies which might from time to time escape me—perchance you might even now and then nudge your neighbor whenever it occurred to me to mistake the Piræus for a man. Well, sir, it is the common law of all; and surely, with your talent, you can brave anything. Let me join my congratulations to those you have already received on the manner in which you have pleaded this cause. But I can not congratulate you upon your obstetric knowledge; it is, at the very best, as deficient as is mine in jurisprudence. I hope that you will be as easily consoled in the matter as I shall.—Yours, PAJOT."—*London Lancet.*

Editorial Abstracts and Selections.

PRACTICAL MEDICINE.

1. *Administration of Quinine.*—The bitter taste of quinine is easily concealed by putting the powder to be exhibited on a portion of the white of an egg and covering it with another portion. In this manner children, or the most "spleeny" adults will swallow it readily.—*Chicago Medical Journal.*

2. *Diabetic Urine*, even when long exposed to the air, does not, like ordinary urine, give off any smell of decomposition. The sugar is converted into alcohol, which passes off by evaporation. This fact affords a tolerable test, when others are not at hand, for the presence or absence of sugar.—*Chicago Med. Journal.*

3. *Loss of Voice from Impaired Nervous Power.*—Maria E., aged nineteen, a delicate-looking, pale girl, was admitted to the West London Hospital in the early part of January with complete aphonia of fourteen weeks' duration, which supervened suddenly upon a slight cold. She had had two or three previous attacks, but much slighter, and lasting only a few days. All her functions, excepting speech, were regular and good. She could only utter a low whisper, which necessitated her giving up her employment of a draper's assistant. She was not hysterical. Laryngoscopy showed the appearances of the larynx to be natural, but the vocal cords were widely separated, and would not at all approximate, as she had not the power to utter a sound sufficiently strong to set them in action. The air appeared to enter and depart without much influencing their motion. There seemed to be nothing else to account for this condition beyond that of impaired nervous power, probably wholly local in its nature.

Dr. Gibbs considered this a fair case to treat simply by the local application to the cords alone of a solution of the tincture of nux vomica. The first use of this agent was followed by immediate but slight action; after a second application it was much increased; and upon applying the nux vomica a fourth time full action was restored, and the girl spoke in her natural voice, which has continued unimpaired.—*London Lancet.*

4. *Microscopical Examination of the Air.*—A series of experiments, originated by M. Revial at the Hospital Lariboisiere has shown the presence of a large amount of organic matter floating in the air. The dust collected from one of the wards contained thirty-six per cent., chiefly composing epithelial cells exhaling the smell of calcined horn or bone. In the air of those rooms where there are sufferers from contagious inflammation of the eyeball, small corpuscles were detached by the microscope, analogous to the virus thrown off by the inflamed eye. It is, therefore, to be assumed, on evidence strictly logical, if not absolute, that the infection is mechanically conveyed by the air.

5. *Cure of Bright's Disease by a Milk Diet.*—A writer in the *Bull. de Therapeutique* for March, over the signature of F., in an article on this subject, contends that the disorganization of the kidneys known by this name is a secondary affection, dependent upon the albuminuria and caused by it. The primitive disease, he contends, is in the blood itself, and consists in a modification of the qualities of the albumen of the serum, at present not understood, by which it passes through the pores of the vessels. Some plausibility would seem to be given to this theory by the known efficacy of astringents, such as the salts of iron, tannin, etc., in many cases. The writer argues that if the condition of the blood can be changed, the disease of the kidneys will be cured. To effect this he strongly recommends a milk diet. From the article, which is too long for us to give entire, we translate the following extract:

"We know that the use of milk as an exclusive diet is a very old remedy for dropsy, whatever may be its cause. Horstius, Hilden, Bontius, Mauriceau, etc., have successfully vaunted the efficacy of this treatment, which, like so many other good things in popular use, was neglected until 1831, when M. Chrestien, of Montpellier, brought this remedy to honored notice, and proved that it would be often successful, when all other means failed. M. Seres, d'Alais, Claudot, Ossieur, Dieudonné, etc., have since arrived at conclusions entirely confirmatory of those reported by Chrestien, and the *Bulletin de Thérapeutique* has not failed to report with all fidelity all the facts which have been brought forward in favor of this remedy. The articles referred to regarded ascites or anasarca only in a general manner, and as a condition, independently of the cause which produced it; and although we must admit that in these results the dropsy of albuminuria may claim a certain number of cases, it had never been studied in a special manner with reference to a milk diet, up to the time of the very remarkable article of M. Guignier, Member of the Faculty of Montpellier, published in the *Bul. de Thérapeutique*, vol liii., p. 337, and that published by M. Artigues in the *Jour. de Méd. et Chirurgie Mili-*

taire. M. Guignier applied himself with commendable assiduity to the specification of the cases in which the method of Chrestien was indicated or the reverse. He believed it useful when there exists a condition of plethora ; hurtful, on the contrary, when the dropsies are of a passive character, as the patients are too debilitated for it. It would be difficult for us to judge of the value of these distinctions and the possibility of defining them in the greater number of cases ; and we can very readily believe that if the dropsies of plethora are best adapted to a milk diet, it is only because they are attacked at an earlier stage and that the constitution of the patient offers then more resources. M. Guignier furthermore does not give the first place to the method of Chrestien, but to that of M. Serres, d'Alais, based as we know on the combination of these three methods : 1st, the diminution of the amount of fluid drank ; 2d, a milk diet ; 3d, the use of raw onions. He lays down his treatment as follows : to choose the milk with special care as regards its freshness and quality, to change it for a supply from another source when the first fails to agree with the patient ; to allow it to be taken *ad libitum* (this practice differs from that of M. Serres) ; to combine chalk or magnesia with it when it excites acidity ; to give up this treatment at the end of twenty days when it fails to produce a marked improvement. M. Guignier, without attaching much importance to the use of raw onions, nevertheless thinks that their diuretic property is useful, and that when the stomach tolerates them they should make a part of this milk regimen.

" The facts offered by M. Guignier were of much weight in favor of a milk diet, and while accepting them with some reserve, in view of the possibility when once the dropsy is absorbed of seeing the albuminuria which produced it still remain, yet the impression could not be resisted that milk affords a means of treatment of the greatest value in albuminuria. The observations published by M. Artigues, physician-in-chief of the army, furnish evidence even more decisive in favor of this regimen. He cites, in fact, two cases of complete recovery, without any return of symptoms for three years. M. Serres's method was that followed by M. Artigues without any variation ; it is that also which ought, in our opinion, to be followed in the treatment of Bright's disease ; it combines, in effect, the advantages of a dry and a milk diet.

" Shall we not be able, by this purely dietetic treatment, to cure radically these formidable affections ? We do not doubt it, if the treatment is employed in good season, when the effusion is recent and the albuminuria has not existed long enough to have produced in the kidneys the organic lesions which are evidently beyond our resources. But even in this case, where our art is reduced to a deplorable helplessness, the following a strict regimen, of a dry and vegetable diet, but above all a milk diet, will give more favorable results than any medication known as yet. We have, therefore, felt it our duty to call attention to these means, which, besides, are recommended by their perfect harmlessness."—*Boston Med. and Surg. Journal.*

OBSTETRICAL.

6. *On the Arrest of the Secretion of Milk.*—Mrs. F., æt 30, has had five children, and has been several times troubled with indurated breasts after labor. She was delivered by a midwife on the first of May inst. of a still-born child. I was consulted twelve hours after her accouchement, on account of some imaginary abnormal sensations, and put her at once on five-grain doses of iodide of potassium every four hours, directing frequent frictions of camphorated oil to the breasts, and keeping them covered with cotton batting and bandaged tightly, hoping by this means to prevent the formation of milk; this caused her some pain in them for twenty-four hours, when it gradually subsided. Had I commenced the treatment a little sooner, I feel confident it would have succeeded, as the quantity secreted on the setting in of the milk fever, was extremely small; to disperse it, I now conjoined with the iodide of potassium, half-drachm doses of the wine of colchicum, continuing the local application of camphor and the bandaging, and giving directions to take away a little of the milk, should the breasts become painful. They were slightly drawn twice, and in two days after the commencement of the colchicum (four days after confinement) I found the mammary gland flat, indurated and without milk. In twenty-four hours after this, I was compelled to suspend the use of the remedy, on account of its purgative action on the bowels, and now trusted to the camphorated oil alone to remove the induration, which it did completely in about a week. The breasts remain much smaller than natural, and the areolæ are of a dark brown color, and papillæ much enlarged. She says she has not had any trouble with her breasts since the first day, and denies feeling the least uneasiness in them. She finds, however, that she is not gaining her strength as fast as usual this time.

Dr. Locock remarks that the ill health that follows the artificial arrest of the milk, is best relieved by laxatives; these I had found necessary to give a few days since, notwithstanding her pale anæmic appearance, as the costiveness with which she had been troubled seemed to be one of the causes of the excessive flow and continued red color of her lochia. She is now on the citrate of iron and quinine, and improving daily.

Extract of Belladonna: To Dr. R. H. Goolden, of St. Thomas' Hospital, the profession is indebted for again bringing into notice the extract of belladonna, as an application to the breasts for the arrest of the secretion of milk. He merely applies it to the areolæ.

Colchicum internally: And having noticed that cows eating the colchicum plant in pastures, immediately became dry, he thought of trying the wine of colchicum, in half-drachm doses, at the same time that he was applying the extract of belladonna to the nipples; and in one case, where the breasts were very tumid, tender, painful and hard, within two hours they became perfectly relieved, the milk greatly absorbed, and what is very important, there was no fever or other inconvenience attending the sudden suppression of the milk.

Dr. Burrows, of Liverpool, who likewise has been very successful with the belladonna, gives conjointly with the colchicum, drachm doses of epsom salts, repeating the mixture every four hours ; and finds that in thirty-six hours, the swollen, hard, tender and red breast becomes cool, pale and flaccid, being finally reduced smaller even than before pregnancy.

Dr. E. U. Berry, of Covent Garden, mentions two cases where in place of arresting the secretion, the belladonna seemed to merely relax the mouths of the lactiferous tubes, and give relief to the inflamed breasts by causing the milk to flow freely away into a bread poultice, and the suckling was continued afterwards. May it not have been the action of the poultice that produced this effect ?

The belladonna does not seem to affect the milk in the breast, and the child may be applied at any time, after washing the nipple carefully.

Dr. A. K. Gardner, of New York, applies a plaster of extract of belladonna spread on kid, and leaves a hole for the nipple when it is desired to remove swelling and decrease the quantity of milk, and the child is allowed to suck without disturbing it.

Camphor : Dr. Harris, of Savannah, who has had much experience, prefers camphor to belladonna, and mixes it with glycerine ; and we have long been in the habit of checking a too excessive flow of milk by frictions of camphorated oil, which have never seemed to affect the child in any way, although kept constantly at the breast.

Iodide of Potassium : This salt has been strongly recommended by some French and German practitioners. Professor M. Roussel, of Bordeaux, who has employed it in twenty cases of painful engorgement of the breast, finds that the iodide removes it generally in three days, and that the milk will return, if desired, by discontinuing the remedy as soon as relief has been obtained ; and farther, that six or eight grains in the twenty-four hours, taken in divided doses, has proved more successful in his hands than when given in larger doses.

Dr. Gailiard Thomas applies the belladonna, and gives large doses of the iodide of potassium internally.

Tobacco : Tobacco ointment made by boiling an ounce of fresh tobacco in a pound of lard, is said to act similar to extract belladonna, and never to produce constitutional effects when applied to the breasts.

Sage : Taken in strong infusion, long since recommended by Van Sweiten, has often been resorted to with success to arrest the flow of milk.—*Canada Lancet.*

7. *Two Cases of Transfusion in Childbed.*— CASE 1. M. W., aged thirty-one. Admitted to Guy's Hospital. Had six children ; with the last four the placenta adhered. Nearly lost her life upon the last occasion. No history of syphilis. She was delivered of the child on Dec. 14th, 1862, quite naturally. Immediately after the expulsion a violent flooding ensued in one large gush. The attendants administered stimuli, and finding the placenta nearly everywhere adherent, sent for Dr. Hicks. She was then almost pulseless, partly sensible, blanched, with cold extremities, and some jactitation. Dr. Hicks, finding blood still flowing from the vagina, and that she had rallied somewhat, cautiously removed the placenta without much difficulty,

although both membranes and placenta were adherent firmly over their greater surface; the uterine surfaces in parts largely covered with the yellow albuminoid patches. There was no loss of blood during or after the operation, and the uterus contracted well. Stimuli were given, and she remained in about the same state for half an hour, when the pulse again began to flag, and to be nearly imperceptible, and with much jactitation and collapse. The transfusing apparatus and the husband had been kept in readiness in case transfusion might be required. This appeared the only alternative. Assisted by the resident clerks, Dr. Cook and Mr. Soper, Dr. Hicks injected at three installments about six ounces of the husband's blood, which quantity was all that could be obtained; the husband nearly fainting, the slowness of the stream necessitating frequent cleansing, whereby considerable waste was sustained. The operation produced a good result for a time. She was able to talk, move with more power, while the pulse improved; but after a short time she became again collapsed. Another attempt to procure more blood failing, she sank two hours after delivery. The apparatus employed was of the funnel and syringe form.

CASE 2. Mrs. ——, an Irishwoman, aged thirty-eight, very ill-fed, mother of six children. On Jan. 16th, 1863, at full term, she was seized with enormous flooding, and was very shortly in a state of collapse. She was found by the obstetric clerk, Dr. Booth, in a pulseless state, very pallid, and the os uteri open to the size of a crown-piece; by that time the bleeding had ceased. Stimuli, etc., were given. No pulse could be felt for an hour, when reaction began, the pulse being thready, at 120 per minute. This continued for another hour, when Dr. Hicks saw her. The os uteri was the same size as before, and unyielding; the placenta could not be felt near the os uteri; there was very slight oozing of blood, and little evidence of collection within. The outline of child and uterus could be plainly felt to correspond. There was still such depression that even vaginal examination caused the pulse to be almost imperceptible. The membranes were ruptured by the catheter. Warmth and stimuli were employed. As it was found upon waiting that the os was gradually expanding, her condition improving, and that the flooding was for the time in abeyance, it was considered advisable not to interfere till the symptoms altered, but to continue to stimulate. For four or five hours she decidedly improved; a slight color returned, and the pulse considerably improved, so that it was hoped she would struggle through. The os gradually dilated, and moderate pains ensued. By the end of that time the os was fairly open, but simultaneously she became lower, the pulse being scarcely felt. No external flooding took place, nor could any be recognized as being internal; the fœtus was mobile. No movement brought on any bleeding. She was then so low, notwithstanding stimulants freely given, that Dr. Hicks, to save her life, decided on transfusion from her husband, which was accordingly done, assisted by the resident clerks, Drs. Clarke and Booth. The instrument used was the funnel and syringe. The supply from a rather ill-fed man was slow and scanty, but altogether about six nces were injected. The pulse, before scarcely perceptible, became :idedly improved, and the patient was able to breathe slower and mer; the jactitation ceased, and she was able to speak strongly. it just at this time oozing of blood took place from the vagina, to extent slight in itself, but significant; and Dr. Hicks considered it now, some rallying having taken place by the transfusion, and livery being possible, it was better to run the risk of depression of ivery than to give any further opportunity for hæmorrhage. The rus was acting moderately, at rather long intervals. The forceps re therefore partly introduced, but there was so much laxity of the rts that they did not readily pass between the uterus and head. '. Hicks, therefore, abandoned their use, and employed his method turning, which was accomplished in a minute or two with great se. The child was gently brought down, the uterus following close-; but after the expulsion of the child, which had been dead some tle time, the placenta was found almost entirely detached. The rus failed to contract afterwards, though there did not seem to be y fresh hæmorrhage; a very small quantity of dark blood and me small clot were in the uterus, but its date and source were not ry clear. The hand was passed into the emptied uterus, and a little ld water injected, but without any contraction ensuing. During all time the patient was well plied with brandy and ammonia, but she on began to sink. Another attempt was made to transfuse, but the urce failed after an ounce was obtained, and while means were being ken to rectify this, it became apparent that the case was hopeless; e sank in a few minutes. From the effects of the transfusion, Dr. cks said that he thought that had labor been completed instead of ipending, the operation would most probably have been successful. *London Lancet.*

8. *Successful Result following Transfusion.*—Having been summoned to a midwifery case on the 11th Jan., 1863, Mr. R. T. Thorne, St. Bartholomew's Hospital, found that a fœtus had just been ex-lled, which was the result of about seven months' gestation, and d evidently been dead for some considerable time. The patient bsequently told him that for the previous six weeks her health had en much impaired; she had become very weak and had felt no fœtal ovements. The breasts also, which had been well developed, had come flaccid and pendulous, and the attendant had ascertained pre-ous to the birth of the child that the uterus did not rise above the nbilicus. In a few minutes, symptoms of internal hæmorrhage me on, and firm pressure was made over the uterus in order to expel e placenta. This was done three times, and each time it was fol-wed by a considerable gush of blood. Mr. Thorne consequently in-oduced his hand into the uterus, and finding the placenta nearly itirely adherent, he detached it; and having placed a firm pad over e uterus, all hæmorrhage ceased. The patient, however, was nearly ilseless, exceedingly pallid, and evidently suffering from the loss of ood, and in consequence some cold brandy and water was adminis-red; on account of vomiting, however, it was discontinued. She

gradually got worse and worse; twice breathing ceased, but it was easily restored by an attempt at artificial respiration. In the meantime an enema syringe was obtained, and about half a pint of hot brandy and water injected into the rectum, but without any effect; and then seeing that she was evidently dying, Mr. Thorne proposed to her friends, as a last resource, the operation of transfusion. It was at once consented to, and a young woman having volunteered to give up a little blood, the assistance of Mr. Vernon, house surgeon to the hospital, was obtained, and the operation was performed; but owing to the loss of some blood and the young woman fainting, they were only able to get about two ounces into the patient's median cephalic vein. This, however, seemed just sufficient to stimulate the heart to renewed action; for before they began life was all but extinct, and the pulse at the radial could scarcely be detected, whereas ten minutes afterwards the pulsations of the temporal artery were very distinct.

During the next six hours she had two injections of hot brandy and strong beef tea, and after this she was fed about every quarter or half hour for the next forty-eight hours.

On visiting her twelve hours after the operation, Mr. Thorne found her complaining of considerable thirst and pain in the head; the tongue was dry, and covered with a thin brown fur; pulse 112, rather full and sharp.

All symptoms of reaction soon passed off. She was kept for ten days on strong fluid nourishment. On the eleventh day she ate a mutton chop, and since then she has steadily improved, and at the present time only complains of debility.—*Ibid.*

9. *Acute Inversion of the Uterus.*—Mr. R. T. Thorne, midwifery assistant to St. Bartholomew's Hospital, was called up during the night of the 19th of December, 1862, to render assistance at a midwifery case. It appears that Mary M., aged thirty-five, the mother of six children, was taken in labor at ten o'clock A. M. on the 18th, and after a natural and easy labor was delivered at half past twelve A. M. on the 19th of a female child. Some little hæmorrhage took place after the expulsion of the child, in consequence of which the attendant endeavored to remove the placenta by traction at the cord about an hour before Mr. Thorne's arrival. The latter gentleman found the patient in an extremely exhausted state, evidently laboring under some aggravated nervous shock. Her face and lips were pale and exsanguine; there was a cold sweat on the forehead and face; she had just fainted and vomited, and on a hasty examination of the wrist no pulsation could be detected. He ordered her some brandy and cold water at once, and proceeded to ascertain the cause of the symptoms.

On the bed close to the vulva, in a pool of blood and numerous clots, lay the placenta, still partially adherent to some body within the vagina. On passing his hand into the vagina, he found the whole cavity of the pelvis, which was very capacious, occupied by a firm globular tumor, which was pressing forcibly on the perineum. No uterus was detected above the tubes by the hand applied over the abdominal parieties; but the extremities of the fingers of his hand within the vagina could easily be felt. He at once detached the placenta, which was then only adherent to the extent of about two square inches (the entire surface had, however, evidently been forcibly detached), and then with the back of his flexed fingers he endeavored to replace the inverted organ, and after about four minutes continual firm pressure it began to yield, and at last resumed its natural position, his hand occupying its cavity. The attendant and Mr. Thorne then kept up digital pressure over the uterus for about an hour and a half, on account of repeated oozings of blood, the patient taking during this time about half a pint of brandy and some infusion of ergot. She complained of great dizziness and of noises in her ears; but arterial action being reëstablished, and the hæmorrhage having entirely ceased, a firm pad was applied over the uterus and left.

The next morning she felt much better, and had a far less anæmic appearance than on the previous night. She complained of great debility and great pain in the head, especially across the brow; skin warm and moist; pulse 68, full volume, very soft and compressible; tongue nearly clean. Has had no sleep.

From this time she gradually improved, taking nutritious diet and tonic medicines, and on the 3rd of January she was able to get up, and has since then gradually resumed her household duties.—*Ibid.*

OPHTHALMOLOGY.

10. *Cases of Myopia and Amblyopia: Means of Diagnosis, and Employment of Tests, etc.*—In the out-patient room of the ophthalmic department of St. Mary's Hospital, patients habitually present themselves, offering no obvious affection of the eyeball to ordinary observation, but complaining of short sight or weak sight. Mr. Ernest Hart observes that with many persons the two phrases are used almost interchangeably, although the myopia may exist without any degree of amblyopia. It not unfrequently happens in ophthalmic practice that patients are seen who have long complained of weak sight, and have been subjected to prolonged and perfectly useless, if not injurious, courses of treatment, simply because the physical conditions of the optic apparatus have not been ascertained, and the particular cause of the defect not made out. In the same way patients are seen very often who have been cautioned against "trying their eyes" by wearing glasses, when, in fact, the use of a duly corrective concave lens is the only rational means by which the focal defects of the eye can be remedied, and the best means of affording relief and averting the evils and annoyances, present and future, incidental to early myopia. The first necessity in such cases is accurately to test the nature of the defect. Mr. Hart has adopted successfully the method employed in the Austrian recruiting service, and which is favorably spoken of in the report from Fort Pitt. It consists in testing the near point at which small print can be made out with concave 6. In subjects of myopia the point is situated within six inches, and in all cases where myopia exists in an aggravated form the test answers very well. In slight cases, and with an unintelligent patient, the

diagnosis is not so readily obtained. But tests with a convex lens may also be employed, and Mr. Hart concludes with certainty that there is no myopia when the patient can read small print at the focal distance of a convex lens. Another test is afforded by the optomeric use of the ophthalmoscope; thus myopia may be diagnosed by the possibility of seeing the reversed image of the background without the convex lens necessary for detecting the upright image.

With reference to the etiology of the disease, Mr. Hart has remarked: "The old notion of the dependence of shortness of sight upon an undue convexity of the cornea is in some measure extinct; but it still exists to a mischievous degree. In fact, this belief is not supported by human or comparative anatomy.. Great flatness of the cornea is perfectly compatible with considerable myopia; indeed, it may be asserted that increased convexity of the cornea, contrary to popular belief, is hardly ever associated with short-sightedness. The actual causes of short sight are probably very various. In all such patients the luminous rays from distant objects are concentrated in front of the retina, and in falling on that membrane form circles of diffusion which render the image indistinct. An excessive convexity of the lens is one cause of short-sight, irregular accommodation another; and the ophthalmoscope has greatly and very importantly enlarged our comprehension of a numerous and obscure class of myopic cases in which the myopic condition may now by its aid be connected with a definite pathological condition. I should say that in seven-eighths of the myopic patients examined ophthalmoscopically, and indeed in nearly all cases where myopia is associated with any degree of amblyopia, a white, crescentric patch has been discernible at the margin of the limits of the optic disc. This is indicative of choroidal atrophy. This atrophy of the choroidal tissue may, indeed, be in some cases congenital; but it may always be considered as indicative of posterior sclero-choroidal staphyloma, with an elongation of the antero-posterior diameter of the eye-ball, explaining the myopia, which is its attendant result. Whether this form of posterior staphyloma be occasionally congenital or not, there can be no doubt, I think, if clinical history avails anything, that in the majority of cases it is the result of slow posterior sclero-choroiditis. This is a very insidious disease of the eye-ball, of which until lately little was known, and, until the ophthalmoscope displayed to the surgical eye the structures of the fundus, nothing could be known. It is accompanied by greatly increased intraocular pressure, and the atrophy and staphyloma of the sclerotic and choroidal coats may be regarded as pathological changes of a remedial character, relieving the eye from the internal pressure which is so peculiarly destructive. It is in these stages, and when the myopia is progressive and obviously depending upon intraocular pressure, and advancing posterior sclero-choroiditis, that the division of the ciliary muscle might be rationally indicated and usefully employed. Certainly, in cases where the evidences of intraocular pressure are palpable in cupping of the optic disc, rigidity of the eye-ball, and marked amblyopia as well as myopia, intraocular myotomy or iridectomy is strictly indicated."—*London Lancet.*

THE

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CONDUCTED BY

E. B. STEVENS, M.D., AND J. A. MURPHY, M.D.

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Original Communications.

ARTICLE I.

Camp Fever.

A Case: with Remarks and a Further Account of the Disease.

BY ALEX. MCBRIDE, M.D., BEREA, O.

[I furnish this case, which I have had an opportunity to treat in detail, as an illustrative appendix to my article in the April number, on Camp Fever. Drs. Barr and McFadden, both of whom have had experience in army diseases, have repeatedly seen the case with me and observed its peculiar characters, and agree with me in pronouncing it a good sample of severe Camp Fever.]

April 16th, 3 P. M.—Was called to see Sergeant S. Hall, who lay in a barrack in the line of field officers' quarters, in a healthy, airy situation, with only two messmates. He is a well-made, plump, good sized man, aged 22 years ; has been in the service about nine months ; came from the City Barracks, Cincinnati, eight days ago, where he had remained about two weeks on his way from the place of his capture at Danville, Ky. ; has lived on army rations exclusively the whole time of service. I am informed he has been "coming down sick" about four days, and that he had not been well for some time previous, having had diarrhœa somewhat.

Present Symptoms.—General and severe aching of the limbs and back, headache not so severe, face dark florid, tongue broad, coated white, moist with transverse and longitudinal fissures occupying its whole central longitudinal region. Pulse full, frequent, not counted ; strong, but not hard. Diarrhœa, abdomen soft, of natural fullness, no appreciable tenderness. Ordered : ℞. Pulv. Doveri, grs. xvj., pulv. potass. chloras., grs. xxx. Mix. Div. in parts No. 2. Take one immediately and the other at bedtime. Drink cider *ad lib.*

17th, 9. A. M. — Pulse 114; aching and general distress much diminished and pulse more softened; bowels more quiet; fissures of tongue more strongly marked; surface slightly moist; has drank nearly a bottle of cider, and relishes it well. Ordered to continue cider, and eat sour vegetables and fruit, if he can get them.

5 P. M.—Pulse 120; has been out doors to stool, and the exertion has brought on general aching and distress rather severely; tongue not dry; fissures more dark; urine scant and reddish yellow. Ordered the same as at first.

18th, 9 A. M.—Pulse 114; tongue, abdomen and surface the same; feels more comfortable; has not much appetite. Ordered to continue same regimen.

4 P. M.—Pulse 110; no distress as yesterday evening, bowels moved freely once; other symptoms same; has eaten a cucumber pickle and some bread, and drank freely of tea. Ordered citric acid drink *ad lib.*, cider, etc., and to take an opiate if bowels became troublesome.

19th, 8 A. M.—Pulse 108; skin moist; feels more prostration; bowels moved copiously once in night; stools semi-liquid, yellowish, with coarse particles of undigested food, (this is the general character of his stools); has more appetite; no pain or distress; did not take opiate. Continue same regimen.

20th, 9 A. M.—Pulse 100; bowels moved slightly three times in night; tongue smaller and coating brownish; feels languid; abdomen slightly fuller, with slight tenderness in hypogastrium when hard pressed. Aphonia complete, (this has been coming on gradually); has had some cough with slight expectoration of tough mucus, from the first much like declining stage of common catarrh; has not received my marked attention for the reason that it is so common in most cases of disease in camp; urine continues scant and heavy. The acids not appearing to correct the urine, I ordered the following, which has often been beneficial in similar cases: ℞. Spirits mindereri, fl.ʒ j., every three hours.

The lowering of the pulse in this case is no certain sign of improvement, for there is not a corresponding amount of fullness and firmness; features dusky red; has been growing more so from the first. This is common in the disease when the lungs are involved.

5 P. M.—Symptoms much the same, bowels moved two or three times; urine improved in quantity and quality. Ordered: ℞. Pulv. Doveri, grs. vij., potass. chloras., grs. xv., to be taken at bedtime, if bowels not quiet. Continue spirits mindereri; regimen the same.

21st, 8 A. M.—Pulse about same, but more soft; the slight tumidity and tenderness have disappeared; coating on tongue very dark, fissures about the same, tongue smaller but not pointed; urine quite free and of improved color; bowels moved once in night; took no opiate; sordes in corners of mouth; features not quite so dusky. Ordered spirits mindereri as before, and same regimen.

7 P. M.—No notable change; has taken the opiate to restrain bowels; urine has become sufficiently free; tongue for two days has been a little more dry than at first. Ordered: Omit spirits mindereri and—℞. Tinct. ferri chloridi, fl.ʒ iv., sol. potass. chloras., fl.℥ iij.ss. M. Dose: fl.℥ every three hours. This combination is chosen for the tonic effect of the tinct. ferri on the capillary system, for its diuretic action and for the moistening effect of the chlor. potass. on the mucous surfaces.

22d.—The attendant by mistake gave only half the quantity ordered, nevertheless it has had some effect. Pulse 108, firmer; urinated freely twice, bowels moved moderately once; no opiate taken; tongue quite black, (from the iron,) surface a little moist; cough with tough expectoration and large dry rales, has become a more marked feature than at first; drinks tolerably freely of the acid drinks. Ordered the same dose continued.

23d, 9 A. M.—Appearance improved, tongue moist and cleaning. Continue same.

8 P. M.—Pulse 108 steady; relishes broth and solid food more than yesterday; drinks the cider and citric acid solution rather freely; urine abundant; stools more liquid; took an opiate to restrain bowels; cough, coarse rales and aphonia continue; expectoration tough and scant. Ordered to omit the medicine. Has now taken in forty-eight hours six fl.ʒ tinct. ferri chloridi, equivalent to seven and a half Ms. every hour.

24th, 8½ A. M.—Pulse 102; slept well in night; complains considerably of the toughness of phlegm, which it is laborious to cough up. The most notable fissures consist of one in median line of tongue, extending toward the tip, with lateral recurved branches in the form of an anchor; the tongue being partially free from coating, these are handsomely displayed; red in the bottom, with the margin penciled with the color of milk and water; the other fissures are observed by the coating, which is still black; tongue quite moist, with little or no disposition to become dry. With a view to expectorant action, ordered—℞. Extract sanguinaria fluidi, tinct. opii et. camph., āā fl.ʒ iij., syrup. scillæ, fl.ʒ x. M. Dose, fl.ʒ j. every three hour.

9 P. M.—Pulse 96 to 102, moderately full, surface more moist;

tongue cleaning; urine free; bowels have not moved; cough not so frequent; expectoration slight; rales over nearly the whole chest; has eaten and drank less, and slept more, than for some days. It would seem that the medicine has a sedative effect. The dose is carefully designed to affect the lungs without disturbing the bowels. Continue same.

25th, 8 A. M.—Pulse 102 to 107; looks improved; feels cheerful; tongue clean, except a few patches; fissures unchanged; expectorates more tough, hard, dirty-looking mucus; rales very much like asthma; bowels moved once, and urine free. Ordered same medicine increased to fl.ʒ jss.

7 P. M.—Pulse 102; expectoration same tough inspissated mucus in large, dirty-whitish clots after several coughing efforts, though cough not very harassing; bowels moved twice; urine free; no tympanitis or tenderness; no vibices, or rose spots or peculiar blotches; is to-day a little dull of hearing, which I hail as a good symptom; eats moderately of various articles; threw his empty cider bottle across the room; tongue still improving, except the fissures which are as deep as ever; tough or dry rales about the same. Ordered same medicine in dose fl.ʒ ij. every four hours.

26th, 8½ A. M.—Patient very drowsy and has been so all night; pulse 102; tongue dry after sleeping; bowels moved once; expectoration still sparse, but more moist; rales more moist; there appears to be periodicity about this drowsiness. Ordered same dose.

8 P. M.—Pulse 96 to 100; drowsiness passed off, feels very comfortable; has sweat considerably about upper part of body; expectorates more than usual; sputa more liquid; rales not so numerous in left lung, but no abatement in right; tongue more dry to-day than for several days, but color good, and easily moistened; bowels moved twice and more consistent; urinates freely; has eaten sour fruits, jellies and other food. Ordered: ℞. Tinct. ferri chloridi, fl.ʒ iv., sol. potass. chloras., fl.℥ iij.ss. M. Dose, fl.℥ ss. every four hours. (The object of iron at the present stage is to produce greater capillary tonicity.)

27th, 8 A. M.—Pulse 102, steady. A notable circumstance which may be observed in this case is, that while taking iron the pulse is more strictly regular; while taking other medicines not of a tonic character the pulse has a variation of about six per minute. This fact seems to sustain the hypothesis upon which it is prescribed. Bowels moved once; expectoration about the same; fewer rales in left lung; appetite for potatoes, which are allowed, boiled.

8 P. M.—Pulse 120, more full; tongue has been moist all day, but is now dry; rales less abundant and of asthmatic character; abdomen soft and natural; there is now an eruption on abdomen, some of which in the morning looked like urticaria and have been itching during the day; they now by candle light are red and of flat papular shape, less than half as large as a split pea; tenderness in region of cœcum, which hurts when he coughs; bowels moved sparsely twice; thin stools; has eaten more than usual to-day and taken to cider again. Ordered: ℞. Ol. ricini, fl.℥ ss., tinct. opii, M. xx. M. To be taken at once.

28th, 8 A. M.—Pulse 84; drowsy; bowels not moved; tenderness continues; dry rales not diminished; says he feels pretty well except the soreness; while present bowels moved, stools containing abundance of unauthorized food, fried potatoes, which accounts for the bad state of the case last evening. Ordered: Solution potass. chloras., fl.ʒ iv. every three hours till mouth becomes moist. Apply turpentine frequently to sore part.

8 P. M.—Pulse 96 to 100; bowels moved twice; mouth more moist, soreness nearly gone; rales nearly same as last night; says breathing feels more free, feels cheerful and engages more in conversation. Ordered to continue solution every four hours.

29th, 7½ A. M.—Pulse about same; bowels have not moved; slept good; is now sweating all over body; soreness gone; tongue moist; rales abundant all over chest; aphonia not improved; feels cheerful. Ordered: ℞. Quiniæ sulphas, pulv. zingiber, āā grs. xx. Mix. Divide in parts No. 5, take one every three hours.

8 P. M.—Pulse 108, regular; tongue moist; bowels moved freely twice; urine free; expectorates more than usual, feels quite smart, but has a little headache. Examined red points in abdomen carefully; redness disappears on pressure, but they are distinctly papular and are not merely "rose-colored spots," or blotches, as in enteric fever. Spleen presents a dull surface, equal to more than twice that of the normal condition, (this was observed the first week, but not noted); abdomen perfectly soft, not bloated in the least. Ordered to omit the quinine unless general diaphoresis occurs.

30th, 8 A. M.—Pulse 84; all the symptoms improved; rales not much changed; slight soreness in left iliac fossa; no headache; took one dose of quinine; expectorates considerably. Ordered quinine continued.

May 1st.—Symptoms generally improved; stools contain no apparently undigested food; fissures of tongue not changed; the red eruption almost disappeared, goes off by fading of the color and subsidence of papules, with slight desquamation; has taken altogether thirty-six grains of quinine; aphonia unchanged. Ordered to take a dose of quinine when sweating freely.

2d.—Pulse 78 to 82; has on his clothes; took one dose of quinine; rales less; cough less. Ordered no medicine.

4th.—Case still improving; rales have disappeared; bowels have moved four times since 2d inst.; stools more consistent.

6th.—Doing well; fissures becoming slightly smaller and voice returned to-day; spleen nearly reduced to natural size; walks about the room a little; flesh flabby; emaciation not great; flesh generally a little tender when roughly handled (this is common in scorbutic diseases); complains of feeling very weak; has fair appetite, and notwithstanding the considerable amount of acids used, is still fond of lemons.

I suppose this patient is now fairly convalescent, but the boundary line of convalescence is as vague in this disease as in enteric fever, and diseases attended with inflammation and sloughing or ulceration, though there is nothing of either in these cases. There is no complaint of soreness of the tongue in this case, notwithstanding the amount of deep sulci; and when asked if it is sore, he says it is not, except when very dry, as it is sometimes after sleeping. This is the case generally in these fevers. This case is now regarded as fairly convalescent and dismissed from special medical surveillance, and his recovery considered certain with the use of such food as he can procure at this camp, though it may be several weeks before the fissures are healed. They will be perceptible after he considers himself quite well.

This case presents a fair sample of a severe case of camp fever. There was more lung complication than we sometimes meet with, though less than in many cases; the diarrhœa was less troublesome than is common, though this I have no doubt was owing to favorable opportunities of good regimen. The aphonia was not a very unusual feature; it occurs often in the army, and from obvious causes. On the whole, it is seldom we have an opportunity to present so entire and well defined a case. Dr. McFaddin is at the present time treating a well marked case of less severity, and during the same time I have met with several presenting the primary symptoms, (which were not observed in this case,) and which have appeared to me to be arrested by the free use of citric acids.

Although this article is already drawn to greater length than should usually be written in simply reporting cases, I trust the present importance of the subject will justify my presenting briefly the manner of formation of fissures of the tongue. The fissures commence some days, or perhaps weeks, before the accession of fever, there frequently being diarrhœa at the same time. The first appearance is an elongated depression, longitudinal or transverse, or several in both directions. The light coating which exists is not partial or broken, but is continuous through the depression, as the grass in a meadow is continuous upon the sides and bottom of a ravine. These continue to grow longer and deeper, the coating remaining unbroken, and it appears on the mucous membrane parts first and the epithelium last, when the fissure is complete. It is true that all the cases presenting these initial or primary fissures do not eventuate in fever, neither do they all have diarrhœa, but many have diarrhœa and cough, with dusky red tinge of features, which seems to indicate the primary œdema or engorgement of the lungs. Many in the stage of primary fissure escape fever or other severe form of disease by means of favorable change of food and other regimen, the disease never becoming ripe; and I think all would escape at this stage if antiscorbutic regimen could be adopted; such at least I have often seen to be the event. The healing or closing of the fissures appears to be something like in appearance the reverse of their formation—closing from the bottom toward the surface, but the process not being complete under several weeks; but the length of time will depend much upon the regimen of the convalescent. A cicatrized appearance remains after the closure. How long the cicatrized appearance continues I can not tell, but it probably is very variable. This same appearance I think results in many cases where the fever has not been fully developed, and is often seen in soldiers who have been strong and hearty for a long time, but never, so far as I have observed, in recruits.

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ART. II.

Oblique Fracture of the Shaft of the Femur near its Middle.

BY S. SEXTON, M.D., CINCINNATI,
Formerly Assistant-Surgeon Eighth Regiment, O.V.I.

The following case is presented to the profession as illustrating the fact that there is not always shortening of the limb after oblique fracture of the thigh bone:

Case.—Mary G., Lock Street, aged 7 years, of nervous temperament, active, and possessing good health. On March 28th, while playing near the door of her mother's room, she fell out upon the porch. Although the porch was only a few inches lower than the chamber floor, yet she fell with considerable force. Her mother, on assisting her to arise, could only account for the great distress by supposing that the bone was broken.

On being sent for, I discovered that the femur was fractured obliquely at the junction of the middle and upper third of the shaft. Displacement was considerable, and all the usual signs of such an injury were very obvious. The little patient did not complain much, except when extension was made with a view to adjustment. Physic's modified splint of Desault was prepared and the fracture adjusted. Three hours after the injury there was but little swelling at the seat of fracture.

29th.—Patient had slept none the previous night, and complained of considerable pain. Cold water dressings were ordered, and the bowels moved with oil.

April 1st.—Full extension not having been previously made, the limb was now brought out to its proper length.

3rd.—The extending apparatus was producing pain and excoriation at the instep and heel. Whisky was applied to the parts every few hours, which had the effect to harden the skin. It was applied as well to the peritoneum. Patient's appetite was now good, and her general appearance favorable. A little swelling was apparent about the region of the knee joint.

10th.—Considerable inconvenience resulted from the abrasions produced by the extending and counter-extending bands. The dressings had, however, for the last few days, been adjusted twice daily.

14th.—Strips of adhesive plaster were now substituted for the lace gaiter and perineal band.

20th.—The perineal band was reapplied, the skin having become less sensitive, and the adhesive strips becoming inconvenient.

25th.—Great care having been taken in keeping the fracture apparatus properly adjusted, it was now removed and splints of binders' boards substituted. The limb now appeared to be of proper length, and the bone seemed to possess its normal outlines, with the exception of the callous mass thrown around the broken ends of the fragments.

May 10.—All dressings were now removed, and directions given to rub the limb several times daily, frequently applying dilute spirits.

June 1st.—Patient has been gradually gaining use of the limb, and can now walk and run anywhere, without any mechanical support.

There is no shortening, or any deformity whatever.

ARTICLE III.

Cæsarean Section.

BY J. W. CONWAY, M.D., MADISON, INDIANA.

In the evening of January 29th, I was called upon by John Heid, four miles in the country, to see his wife, then in her first labor. I found Dr. Graeter in attendance, having been called the morning previous, the patient having been in labor now fourteen hours. Upon making an examination, I was astonished to find the cavity of the pelvis almost entirely occupied by a fibrous mass, vagina shut and much distorted. The diameters of the superior strait I found about as follows: that of the anterior posterior one and a quarter inches, that of the transverse one and a half inches. The os uteri could only be reached at one point, immediately behind and above the arch of the os pubis. This was barely possible. I found the os fully dilated and the membranes ruptured. By outward manipulation I could trace the outlines of the child's head through the walls of the abdomen directly above the pubic arch.

I communicated with Dr. G. and informed him there was no possible means of delivering the woman by any of the ordinary methods, but that the last and only resort was the Cæsarean Section. This I made known to the husband and patient, as the only escape from a certain and lingering death. I explained fully its nature and the bare possibility of ultimate success. They consented to the operation, satisfied of the fearfulness of the undertaking. I administered a free dose of the solut. muriate morph., and waited one hour for its sedative effects. Every preparation having been made, I proceeded to operate, by candlelight, at 8.30 P. M. I chose to operate through the linea alba, and at one bold stroke laid open the integument and adipose tissue down to the peritoneum. This I divided, (making my incision from the umbilicus to very near the symphysis pubis,) laying bare the uterus from fundus to cervix. I waited for a moment for the suppression of hæmorrhage, (which was slight.) I then at another stroke laid open the uterus, found the child in natural position, removed it, placenta detached, removed the secundines, grasped the uterus, which contracted firmly, obliterating almost effectually any evidence of its having been cut. I then drew together the abdominal incision and dressed with sutures and silver pins, over which I placed a dressing of adhesive plaster, and finished up with a simple roller. The whole time occupied was fifteen minutes. I now left the patient in charge of her nurse, ordering solution of muriate of morphine every four or five hours to relieve pain and quiet the nervous system, enjoining upon her to restrict her diet to rice water.

Jan. 30th.—Twenty hours after operation, visited case. Patient comfortable, pulse 150 per minute, rested well, tongue cleaned, no thirst. Morphine and rice water continued.

31st.—Pulse 140. Treatment continued.

Feb. 1st.—Pulse 140, skin moist, complains of hunger. Same diet.

2d.—Pulse 140. Same diet.

3d.—Ordered weak animal broths to be used, increasing their richness daily. This I continued from day to day.

8th.—Bowels moved for first time and without any medicine, pulse 120, skin in good condition, wound almost healed.

I continued to visit the case daily, finding at each visit every thing doing remarkably well; appetite good, bowels regular and wound healing, up to March 5, when I discharged the case cured.

Remarks.—The patient in question is a weakly, delicate female of strumous habit, who, during her entire pregnancy, was confined to her room almost entirely by a tertian ague. The condition of her system was such, as we naturally infer, in which the reparative energies of nature are below par; and yet the wound healed throughout its whole course, except at the lower angle, by the first intention, and at no time was there perceptible the least evidence of tympanitis. Considering the fearful wounding of the peritoneum, the cachexia of the system, the ready union of the parts and the speedy convalescence, the case is, I think, remarkable.

I operated in the median line for the following reasons: I deem it the safest. In the first place, there is not that danger of wounding vessels that are liable to bleed much, and in the second place, the wound can be brought together and so held better, because here we have no muscular tonicity to overcome; hence, expect a more speedy and perfect union because of the perfect adaptation of the parts. And then the wound can be dressed with more freedom and the patient moved without that fear we would have in the bi-lateral operation.

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Ovariotomy in France.—At a late distribution of prizes in the gift of the Paris Academy of Medicine, a reward of 2000 francs was appropriated from Barbier's bequest (a large sum left to reward the discoverer of a cure of incurable diseases, or the nearest approach to this) to Dr. Kœberlé, Assistant-Professor at the Faculty of Medicine of Strasbourg, for two successful cases of ovariotomy performed by him. These were the first successful operations performed in France.

Proceedings of Societies.

Proceedings of the Cincinnati Academy of Medicine.

Reported by W. T. Brown, M.D., Secretary.

Hall of Academy of Medicine, March 30, 1863.

Fistula in Ano with Phthisis.—Dr. Murphy said the treatment of fistula in ano as a result or complication of phthisis pulmonalis is exceedingly embarrassing. In the first place, it is very annoying to the patient. Second, whether as a curative measure an operation will be followed with benefit to the patient or his disease.

Fistula in ano in phthisis pulmonalis may arise from a deposition of tubercular matter in the cellular tissue of the anus, or again, it may arise from congestion of the parts, constipation, excessive venery, enlargement of the prostrate gland; or it may arise from some foreign substance, as a fish-bone in the rectum.

The question to be decided is, whether it originates from a deposit of tubercle or not. As a general rule, when fistula in ano comes on early in a case of phthisis pulmonalis it is from tubercular deposition, and the tubercular matter in this situation undergoes the same changes as it does in the parenchymatous tissue of the lungs. This is the general result, and when it is thus decided the treatment is only palliative: simply keeping the bowels open and the parts clean. When, however, the fistula is the result of congestion, or of a foreign body, a very nice point comes up, whether to operate with the ligature or knife. By exclusion we may approach a diagnosis.

As a general rule, in phthisis pulmonalis a fistula comes on early; but you may have a fistula in a tubercular subject, coming on after two years, and the question comes up whether to operate or not. It was his opinion it would be better to let it alone. If the cough and expectoration is increasing, operative proceedings increase the progress of the disease itself. You had better advise the patient to take tonics, out-door exercise, ride on horseback, etc., etc. But if they can not do this, open the abscess. You make the patient more comfortable for a time; but as the pus re-accumulates, the patient will insist upon having an operation performed. He believed it the safest and best plan to let it alone until the lungs are cleared up, and the patient has lost all cough, and the lungs are in a natural condition.

A young man with phthisis pulmonalis, having a fistula in ano, came to consult him. Some quack had performed an operation to cure it. He had had previously severe hæmorrhage. Nature made an effort to heal the fistula, but in the mean time he had a return of the hæmorrhage, and the healing process stopped. He believed in such cases, when the fistula is tubercular, it ought to be let alone, and cod-liver oil, alcoholic stimulants, iron, zinc, etc., prescribed, and the patient made to take out-door exercise.

In a case of idiopathic fistula in phthisis pulmonalis he was opposed to operative proceedings, particularly when the patient is going on well, the pulse has come down, the waxy appearance of the countenance lost, expectoration reduced, and the patient has gained flesh and strength. He was opposed to doing anything more than palliate, because the patient is so inclined or so disposed to have a fresh tubercular deposition in his lungs.

Again, it has been observed, and Thompson gives it as a fact from statistics, that in several cases of fistula in ano in tubercular subjects operative proceedings were followed with bad results. And he believed the fistula acts as a drain from the lungs themselves and prevents further tubercular deposition.

Another young man came to him from Indiana, some two years ago, with all the rational signs of phthisis pulmonalis well marked. He put him on constitutional treatment and sent him home, but he returned some few months ago, having a fistula in ano. The pain and inflammation had reduced him, he did not sleep; still he thought best to let the fistula alone. He again put him on general treatment, and advised him to go home and take out-door exercise, ride horseback, etc. He returned to the city in about six weeks very much improved, having gained in flesh, and to a great degree cured of his cough. He was of the opinion that the fistula would act in prolonging his life or curing his disease. He has regained to a very considerable degree the vital capacity of the tuberculous lung.

The first patient he spoke of this evening desired very much to have an operation performed to cure the fistula—he wanted to marry. The doctor declined operating and advised him not to marry. He has over the apex of the left lung great dullness, and has a slight cough. He is taking whisky, and cod-liver oil, and a good substantial diet. He thought in this case the whisky diverted the trouble from the lungs, and operative measures would render tubercular deposition more active. In the majority of cases he thought operative proceedings should be postponed until as late a period as possible.

Dr. W. P. Thornton said he must differ from the gentleman in some of his views. It is true in the majority of cases it is best to do nothing with the fistula, because the patient has but a few months to live at most. If there are tubercles in the lungs, and ulcerative action already commenced or going on, we consider this almost an incurable condition. But he could not see any advantage to be derived from a drain on the system, either by a fistula or from piles. Medicine has a tradition, "We believe too much." This idea that piles or a fistula acts as a drain, and that beneficially, he had long since discarded. On the contrary, in a case of tubercular deposition the vital fluids are below par. The fibrin is insufficient in quantity and vitality. Is a prolonged suppuration calculated to increase the fibrin? On the contrary, will it not increase the tubercular deposition in the lungs, and decrease the red corpuscles in the blood? Surgeons, he knew, were careful about operating when they thought the case at all doubtful. But he could conceive of no condition where a suppuration would be beneficial in such cases. If he had a patient with fistula, and a prospect of living some time, he would operate.

Dr. Woodward thought the result of experience was better than theory. The large majority of the profession are opposed to operative proceedings. The fistula acts as a counter-irritant in diverting the disease from the lungs, and thus reduces the inflammatory lesions in the parenchymatous structures. He concurred fully with the first speaker, that active exercise is indispensable for the welfare of the patient. This doctrine his old preceptor, Dr. Parish, of Philadelphia, vindicated. He would have the patient put a knapsack on his back and travel. In his early experience it was the practice with many to keep consumptive patients in a close room, never allow them to breathe the fresh air, and to bleed them occasionally to keep down inflammatory action; but few, he said, survived this treatment more than a few months. Dr. Parish once had an ulcerative action on his own lungs, but cured himself by active exercise, and riding in his rough spring wagon. He said if he were examined after he was dead, they would find the scar in his lungs, the result of the ulcerative action. He, Dr. Parish, was opposed to all operative proceedings in cases of fistula in ano as a result or complication of phthisis pulmonalis, and with him he agreed perfectly.

Dr. Murphy said in reply to Dr. Thornton, that the counter-irritation produced by a fistula, or the profluvia from the fistula being of no benefit to the phthisical subject, does not rest on sufficient facts. That old doctrine, "Ubi irritatio, ibi fluxus," can not be laid aside in all cases. For instance, in certain inflammations of the eye the ophthalmologist is forced by want of art to cure the inflammation, to establish a discharge by an issue or seton in the back of the neck. He arose to this point that there is inflammation in the worst cases of tubercular deposition, but a fistula coming on, all inflammation and tubercular deposit cease in the lungs. If the gentleman means that the discharge from piles in a person of apoplectic habit is of no benefit, he certainly thought he was in error, and so in regard to a fistula in phthisis pulmonalis.

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Fourteenth Annual Meeting of the American Medical Association,

HELD AT CHICAGO, ILL., JUNE 2-4, 1868.

The opening session was presided over by the First Vice President, Dr. Wilson Jewell, of Penn. The Chairman of the Committee of Arrangements, Dr. N. S. Davis, welcomed the members to the city of Chicago, and presented a report, explaining why no regular meeting had been held since 1860. The report was adopted. The following programme of exercises was announced:

General Session, from 9 o'clock A. M. to 1 o'clock P. M. Afternoon Session, in Sections, from 3 o'clock P. M. to 6 P. M. in rooms as follows:

Section on Surgery, in Bryan Hall.

Section on Practical Medicine and Obstetrics, in Bryan Hall, No. 2.

Section on Anatomy and Physiology, in Methodist Church Block, 3d floor.

Section on Chemistry and Materia Medica, in the Methodist Church Block, 4th floor.

Section on Meteorology, Medical Topography, Epidemic Diseases, Medical Jurisprudence and Hygiene, in Methodist Church Block, 3d floor.

A recess of ten minutes was announced by the Chair, to enable the delegates to select from their number nominating delegates; after which the retiring acting President, Wilson Jewell, of Pa., 1st Vice President, delivered his valedictory, which was an able, patriotic and scientific address. On motion of Dr. Sprague, of New York, the thanks of the Convention were tendered for the address, and a copy requested for publication.

Afternoon Session.

Dr. Haswell, of Delaware, read the Treasurer's Report, recommending that only papers of the greatest importance should be published in the Transactions, owing to the increased expense of printing and publishing. Expended since last meeting, $2,579.86. Balance on hand, $504.21. He also read the report of the Committee on Publication, which was accepted.

Dr. Griscom, of New York, read an account of a remarkable case of diarrhœa adiposa, which has no parallel in medical records.

Dr. D. L. McGugin, of Iowa, from the Committee on Prize Essays, reported an Essay entitled, "An Inquiry into the Physiological and Medicinal Properties of the Veratrum Viride, together with some Physiological and Chemical Observations upon the Alkaloid Veratria obtained from this and other species," by Samuel R. Percy, M.D., Prof. of Materia Medica and Therapeutics, New York Medical College. After commendatory remarks from several members, the essay was decided to be worthy of publication in the Transactions, and also entitled to the prize—$100 ; and it was thus received and disposed of.

The Committee on Nominations reported that they had nominated the following, who were subsequently elected as the officers for the ensuing year : *President* — Dr. Alden March, of New York ; *Vice Presidents*— Drs. James Cooper, of Delaware, David Prince, of Illinois, C. C. Cox, of Maryland, and E. S. Carr, of Wisconsin ; *Treasurer*—Dr. Caspar Wister, of Philadelphia.

The election of Secretaries was deferred till the place of the next meeting was decided upon.

The newly-elected officers were conducted to their respective positions.

Reports were called for from committees. Dr. D. L. McGugin, of Iowa, Dr. C. C. Cox, of Maryland, made verbal reports, and were continued on committees. Dr. Davis read a communication from Dr. Squibb, of New York, of the Committee on Practical Workings of the U. S. Law relating to the Inspection of Drugs and Medicines. He was unable to report ; continued. Dr. A. K. Gardner's paper "On the Use and Abuse of Pessaries" was presented, and the reading postponed till Wednesday morning. Dr. C. C. Cox, of Maryland, asked and was granted a few weeks to complete his report on "American Medical Necrology" ; also continued on same committee for another year.

A letter from Dr. H. I. Bowditch, of Boston, was read, announcing the receipt of $356 toward the Hunter Memorial, with a list of officers and agents, and on motion the Committee were instructed to forward the amount of funds on hand, and to close the account.

On motion of Dr. Lawson, of Ohio, it was—

Resolved, That a committee of one from each State represented in this Association be appointed to inquire into the recent order issued by the Surgeon-General of the United States Army, in which the further supply of calomel and antimony is prohibited, and to report at as early a period as convenient during the session of the Association.

Dr. Arnold, of New York, submitted to the Convention his pamphlet on "Medical Provision for Railroads as a Humanitarian Measure, as well as a Source of Economy to the Companies." Copies of this work (which embraces an account of all that has been accomplished by the profession to the present time) were presented to the members, with the request that, after being read, the subject be brought up for discussion at some period of this session.

Dr. C. C. Cox, of Maryland, offered the following resolutions, with an appropriate introduction, which, after endorsing remarks from several members, were adopted unanimously:

> *Resolved*, That a committee of five be appointed by the Chair to draft a memorial to Congress, asking the enactment of a law by which surgeons in the service of the United States Army may be accorded relative rank in the same.
>
> *Resolved*, That each medical gentleman present be urgently invited to use every proper influence with the member of Congress from his own district, to urge the passage of a law, at the coming session of Congress, favorable to this object.

The Association adjourned to 9 A. M., Wednesday.

WEDNESDAY MORNING SESSION.

A large number of additional members from several States were announced as having arrived and registered their names as delegates, including a large number of the physicians and surgeons of Chicago.

The reports of committees being in order, on motion, that of the Committee on Medical Education was postponed until afternoon.

The Committee on Appointments made their report, which, on motion, was accepted. Pending its adoption, it proposing Baltimore, Maryland, as the next place of meeting, considerable discussion arose, various members proposing different places. The member from Maryland advocated the feasibility of appointing the next meeting at Baltimore, as a national measure. It is for the interest of the Association and the country to hold the meeting *as far South as possible*. The effect of holding it at Baltimore would be a healthy one upon that city and its medical interests. Men of wealth and influence would open their doors and extend warm hospitality to the members of the Association. The question finally resolving itself into a choice between Baltimore and New York city, the latter was unanimously voted for as the place for holding the next meeting.

The balance of the report, concerning the officers of the next meeting, committees, etc., was referred back to the committee for reconstruction, rendered necessary by the substitution of New York for Baltimore.

On motion, a committee, consisting of one member from each State, was appointed to investigate and report upon the present, and a better ambulance system in the army of the United States.

A resolution of thanks to Dr. Wilson Jewell, late acting President, for the able and dignified manner in which he has presided over the deliberations of the Association, was unanimously adopted.

A resolution, requiring the appointment of a committee to urge the compulsory vaccination of every person in the United States, was referred to the Section on Hygiene.

The report of Dr. A. K. Gardner, of New York, regarding the use and abuse of pessaries, the reading of which was yesterday postponed until this morning, was called up, as next in order, and, on motion, the reading of it postponed until next year.

The Committee appointed to prepare suitable resolutions appropriate to the loss of the Association by the death of its late President, the late Dr. Eli Ives, of Connecticut, made their report, which, after a slight amendment, was adopted.

The Committee on Voluntary Communications presented an abstract of a paper by Dr. Andrews, of Chicago, on "Diatheses—Their Surgical Relations," which was read by the author. Approved, and referred to the Committee of Publication.

The meetings of Sections having been abolished, the President appointed as the Committee on Compulsory Vaccination, which had previously been referred to the Section on Hygiene, Drs. Hibbard, of Indiana, Jewell, of Pennsylvania, and Griscom, of New York.

Afternoon Session.

According to a resolution passed this morning, Dr. D. J. Macgowan, of New York, from China and Japan, was invited to address the Association. He explained to the meeting the professional bearings of his proposed scientific and industrial expedition to the unknown parts of Eastern Asia. Investigation in relation to the history of epidemics, into the materia medica, and into the ethnology of those lands, can not fail to elicit many facts which promise to be of incalculable value to medicine and the collateral sciences. Dr. M. further expressed a hope that the Association would take some measures to induce the Haytien Government to undertake the acclimitization of Cinchona trees (quinine plants.) He gave an account of the success of the Dutch in Java, and of the English in India, and fully believes that in St. Domingo these invaluable plants might be readily cultivated, and thus *secure additional* supplies of this great remedy.

Dr. Macgowan has been in correspondence with the Haytien Ambassador in Washington, on the subject, and solicits the influence of the profession, in urging the institution of the necessary experiments in those portions of America north of the equator where the soil and climate seem to afford sufficient encouragement.

In the course of his remarks, the speaker gave an account of the standing of the medical profession in China and Japan, of their medical literature, etc.; also stated the remarkable fact that they have made many discoveries in the use of remedies for certain diseases, in some cases either actually the same or very similar to those discovered and used here.

Dr. C. C. Cox, from the Committee on Medical Education, read an able, scientific paper on the subject, reviewing the past history of the profession in this respect, and the absence of proper attention to the subject. Many valuable suggestions as to needed improvements were also made. After the rendering of this report, the Committee submitted the following resolutions, which, after discussion, were adopted:

Resolved, That a thorough preliminary education in English, Latin, mathematics and physics, constitutes an essential pre-requisite to the admission of a student of medicine into the office of a medical preceptor, or as a matriculant of a respectable Medical College.

Resolved, That the advancement of medical education demands a more extended and symmetrical course of instruction in the colleges, and a more thorough and impartial examination for the degree of Doctor of Medicine, than at present prevail.

Resolved, That Medical Jurisprudence and Hygiene are highly important branches of medical science, deserving the careful consideration of all medical teachers and schools.

Resolved, That all societies for medical improvement—State, District and County—are important auxiliaries to the advancement and promotion of science, and are therefore highly recommended by this body, as valuable levers in the cause of medical education.

The Committee appointed to make a report upon the recent order of the Surgeon-General, prohibiting the use of mercurials and tartarized antimony by the Army Surgical Corps, made a majority report through Dr. Lawson, of Cincinnati, and an entirely antagonistic minority report by Dr. Woodworth, of Indiana. The former strongly favored the use of these remedial agents in the army, and the latter as strongly discountenanced their use there.

THURSDAY MORNING SESSION.

The Association convened at 9 o'clock.

Dr. Cox, of the army, announced the sudden departure of Dr. Wilson Jewell, of Pa., caused by receiving intelligence of the unexpected death of a son, and offered a resolution of condolence. Adopted.

Regular business being in order, the reports of Committees were taken up.

Dr. Gilbert, of the army, in behalf of the Committee on the extinction of the Aboriginal Races, reported progress, and, on motion, the Committee was continued another year.

The President having announced that the order of the Surgeon-General, U.S.A., debarring calomel and tartar emetic from the use of army surgeons, and which was previously referred to a Committee, was in order, by consent of the Association the Committee on the subject offered a substitute for the resolutions introduced yesterday.

Pending the discussion, previous to the vote, Dr. Cox, of the army, spoke substantially as follows :

> " While the Association had the right to protest against the order of the Surgeon-General, he wished it to remember that the order referred exclusively to the corps of army surgeons under his control, and had no reference to the use of those drugs in private practice. The order originated in the abuse of calomel by a number of incompetent surgeons in the army, appointed by the Governors of the several States, who consider the *liver* the pack-horse of the human system. The Medical Bureau of the United States comprises men of science, who understand how far the evil has been perpetuated and the necessity of correcting its abuses. The fact that other mercurials have not been interfered with, shows how great the necessity that exists for an order so apparently sweeping, and which the Association deems so arbitrary.
>
> " He did not desire to protract the debate, but felt it due his position to say something before the final vote should be taken. He was not up either to defend or condemn the order. In a long practice he had seen the abuse of calomel in improper hands, as well as its benefits from its legitimate and judicious use. He wished a discrimination to be made between the propriety of the order and the motives of the Surgeon-General. That gentleman's high character and motives are not to be questioned in this or any other public body. He deserved the thanks of the profession for the wholesome interest he had taken in the subject."

Dr. Cox's position called up several members in reply. Calomel had fallen under the ban of an " unwise, unnecessary, and unprofessional" order, and that order received animadversion, ridicule and unstinted opposition. The discussion became general, and while some desired to place no obstacles in the field, their opinion of the order was of a character that culminated in the following resolutions, which were adopted :

Resolved, **1.—That this Association condemn, as unwise and unnecessary, the circular of the Surgeon-General prohibiting the further supply of calomel**

and tartar emetic for use in the army; and that we regard such an order as an indignity to the military surgeons, while it is in direct opposition to the opinions of the regular profession of medicine.

***Resolved*, 2.—That the withholding ordinary medicines from the army surgeons implies a want of confidence in their skill as a body, which, if true, calls for the prompt interposition of the proper authorities; but if the imputation of a want of skill is unfounded, as we believe it is, the refusal to supply proper medicines is wholly unjustifiable.**

***Resolved*, 3.—That Circular No. 6 being impolitic and prejudicial to the interests of the service, it is the decided sense of this Association, that a due regard for the welfare of the army requires, and we do, therefore, earnestly recommend, the recision of that Circular, and the substitution of the more just and philosophical method of correcting abuses, if any exist, by holding each surgeon, individually, responsible for the proper discharge of his appropriate duties.**

The entire report, giving a history and details of the subject, in the same spirit, was also adopted.

On motion, it was resolved that a copy of the above resolutions be forwarded to the President of the United States, the Surgeon-General United States Army, and the Secretary of War.

The Nominating Committee reported back the following officers of the Association for the present year:

Secretaries.—Drs. H. A. Johnson, of Ill.; Guido Furman, of New York.

Committee of Arrangements.—Drs. James Anderson, N. Blakeman, T. M. Markoe, T. C. Finnell, Austin Flint, Jr., E. S. F. Arnold, J. H. Griscom.

Committee on Prize Essays. — Drs. D. F. Condie, of Pa.; E. Wallace, of Pa.; Wilson Jewell, of Pa.; E. R. Peaslee, of New York; Alfred Stillé, of Pa.

Committee on Medical Education.—Drs. J. C. Dalton, of N. Y.; M. L. Linton, of Mo.; John Frissell, of Va.; Howard Townsend, of New York; W. H. Byford, of Ill.

Committee on Medical Literature.—Drs. L. M. Lawson, of Ohio; E. L. McGugin, of Iowa; William Mayberry, of Pa.; H. Noble, of Ill.; John Homans, of Mass.

Committee on Publication.—Drs. F. G. Smith, Chairman, of Pa.; Caspar Wistar, of Pa.; Ed. Hartshorne, of Pa.; H. F. Askew, of Del.; S. G. Hubbard, of Conn.; H. A. Johnson, of Ill.; Guido Furman, of New York.

Committee on Insanity.—Drs. Ralph Hills, of Ohio; C. H. Nichols, of D. C.; D. P. Bissell, of New York; S. W. Butler, of Pa.; John S. Butler, of Conn.

Dr. H. G. Davis commenced reading a paper on "The American Method of Treating Joint Diseases and Deformities," which was referred to the Committee of Publication, and its further reading suspended.

Dr. Homburger read a paper upon the use of the laryngoscope, exhibiting the instruments, and another upon a case of disappearance of the iris behind the lens. Referred to Committee of Publication.

The paper of Dr. Griscom, on a case of diarrhœa adiposa, was, on motion of Dr. Furman, referred to the Committee of Publication.

Dr. A. Fisher read a paper on the use of sulphites of lime and soda in the treatment of hospital gangrene, phlebitis, erysipelas, and other zymotic diseases. On motion, the paper was referred to a committee of three, of which the author is chairman, to continue his investigations, and report next year.

Dr. Cox, of the army, offered two resolutions—one of thanks to the citizens of Chicago, for their kindness and hospitality shown to the members of the Association during its sessions here, and another of thanks to the retiring Secretary, Dr. Hubbard, for his able and faithful services.

The amendments to the Constitution of the Association proposed at the last meeting, were called up, discussed, and rejected.

A complimentary resolution, thanking the President and Secretary for their services, was adopted.

Afternoon Session.

The Convention assembled and was called to order by the President, at 3 o'clock.

A letter was read from Dr. Russell, of Mt. Vernon, Ohio, asking to be excused from further service on a special committee. On motion, he was excused. A similar communication was also read from Prof. Sage, of Michigan, and disposed of in the same manner.

Dr. N. S. Davis offered an amendment to the Constitution, providing for the appointment of one permanent Secretary. Under the rules the amendment lays over one year.

The Committee on Nominations reported the appointment of numerous gentlemen to act upon various matters that might come before the next annual meeting.

The following resolution was offered by Dr. Arnold, and passed:

WHEREAS, The railroad is fast becoming the great medium of land travel in all parts of the world; and whereas, in spite of all regulations and care, serious accidents are continually occurring, attended with loss of life, such being greatly augmented by the total want of any local medical provision to meet such, as well as by the absence of any appliances whatever, calculated to strengthen the hands of the surgeon; therefore, be it

Resolved, That such medical provision shall be made by the railroads; and that by the diminution of suffering, as well as by the saving of life, while economy would accrue to the railroad companies, and the interests of humanity be greatly served.

A lengthy memorial was received and read from the special committee appointed to address Congress in relation to the rank and the pay of army surgeons. On motion, the report was accepted and adopted.

On motion, the Secretary was instructed to have the memorial printed, and to send copies of the same to public officers at Washington.

After some further proceedings of an informal nature, the Convention adjourned.

Seventeenth Annual Session of the Ohio State Medical Society.

Reported by E. B. Stevens, M.D., Secretary.

Ohio White Sulphur Springs, June 16, 1868.

The Ohio State Medical Society was called to order at 10 o'clock A. M. The President, Dr. J. W. Russell, in the chair; Dr. E. B. Stevens, Secretary.

On motion, the reading of the minutes of last year was omitted.

Dr. Reamy, Chairman of the Executive Committee, being absent, Dr. M. Dawson reported that all necessary arrangements had been made for the accommodation of the Society by Mr. Wilson, and moved that the order of business of the two past years be adopted for the present sessions of the Society.

On motion, the report accepted and suggestion adopted.

On motion, it was ordered that all the members present register their names at the Secretary's desk.

The President announced the following as the Committee on Nominations: Drs. Murphy, Beeman, Robt. Thompson, Hunt and Andrews.

Dr. Robt. Thompson offered the following:

Resolved, That this Society cordially invite all literary, scientific and professional gentlemen that now are, or may yet arrive at the "White Sulphur Springs" during our sessions, to take seats among us, as it may suit their pleasure and convenience.

Adopted.

The President appointed Drs. Kirtland and Scarff to fill vacancies on the Finance Committee, who subsequently presented the following report:

The Finance Committee beg leave to report that an assessment upon each member of $1.00 be and is hereby made for the current expenses of the coming year.

C. P. Landon,
J. P. Kirtland, } Finance Committee.
W. D. Scarff,

The report was received and adopted.

On motion, the order of business was suspended to allow the Chairman of the Publication Committee to make the following report:

The Committee on Publication respectfully report that two hundred and fifty copies (250) of the Transactions for 1862 were published at an expense of $154.05. E. B. STEVENS, Chairman.

On motion, report received.

Dr. Landon offered a resolution that the Society do not wait longer for the report of the Nominating Committee, but proceed to nominate and ballot in open Society for officers for the ensuing year; which, after various attempts at amendment, and ineffectual efforts to withdraw, was finally lost. And

On motion, Drs. M. Dawson, M. Thompson and Hamilton were appointed a Committee to wait upon the Nominating Committee, with instructions to report forthwith.

The Committee on Nominations made their report, and the Society proceeded to ballot with the following result:

President......W. P. KINCAID, of Neville.

Vice Presidents.

M. DAWSON, of Royalton,
D. S. GANS, of Cincinnati,
DAVID NOBLE, of Highland Co.
J. J. HAMILL, of Newark.

Secretaries.

E. B. STEVENS, of Cincinnati, N. DALTON, of Logan.

Treasurer......J. B. THOMPSON, of Columbus.

Committee on Admissions.

J. G. Kyle, T. L. Neal, R. L. Sweney, C. P. Landon, A. Metz.

On motion, the sum of $1.00 was ordered to be put to the credit of Dr. Belding, as amount paid Dr. Rickey, former Treasurer, and not credited.

The President appointed Drs. M. Dawson and P. Crume a Committee to wait upon the President elect, inform him of his election, and escort him to the chair immediately after recess.

On motion, the Society took a recess until 2 o'clock.

Afternoon Session.

The Committee conducted the President elect, Dr. Kincaid, to the chair, who acknowledged the compliment paid him by the Society in a few brief remarks.

The retiring President, Dr. Russell, then proceeded to deliver his valedictory address, his topic being "The Means for Professional Advancement."

On motion, the address was referred to the Committee on Publication, with instructions to print.

The Standing Committees were called. The Committee on Medical Societies presented a lengthy report on the condition of the Societies auxiliary to the State Society, with considerations and suggestions for advancing the efficiency of the Society. On motion, referred to the Committee on Publication, with discretionary power to print.

The Constitution and Bye-laws of the Mt. Vernon Medical Society were presented, and referred to the Committee on Medical Societies, who subsequently further reported, that having examined the same, they recommend the Mt. Vernon Medical Society to be admitted as auxiliary to the State Society. Report accepted and adopted.

The Secretary announced that arrangements had been made with the Little Miami, Columbus and Xenia, Hamilton and Dayton, Columbus and Cleveland, and Pittsburg, Columbus and Cincinnati Railroads, returning members in attendance on this Society and their families free.

On motion of Dr. Hamilton, the Secretary was directed to make acknowledgment to these companies for their courtesy.

The Special Committees were called, and a portion reported themselves in readiness ; also several volunteer papers were announced.

The Chairman of the Committee on Obituaries stated that he should report before the adjournment of the Society, and expressed his regrets that individual members were so forgetful of their duty to coöperate in the contribution of materials for obituary notices.

Dr. Stevens reported that Prof. Blackman and himself had attended the Indiana State Society at its session last fall, representing this Society ; that the Indiana Society was a live, working Society, and that it sent greetings to the Ohio State Medical Society.

Dr. Kincaid stated that no meeting of the Kentucky State Society was held last year, hence he had not attended as delegate from this Society.

The resolution offered this morning by the Committee on Nominations was on motion taken up and adopted, allowing $100 a year as compensation to the Treasurer.

Dr. Gans offered the following :

Resolved, That hereafter the respective Special Committees on scientific subjects shall ordinarily be composed of but one member.

Adopted.

Dr. Stevens offered the following :

Resolved, 1st, That hereafter the regular annual election of officers shall be made the order of business at some deferred hour of the sessions, instead of at the opening, as is now the custom.

2nd, And the nominations shall be made in open session of the Society, without the intervention of a Committee.

Adopted.

The Secretary read a communication from Drs. Davis and Armor, of Dayton, in regard to the complaints made against Dr. Oliver Crook, and referred to them as a special committee at the last annual meeting. (See report on file.)

On motion, the whole matter referred to the Committee on Ethics, with instructions to report to-morrow morning.

On motion of Dr. Murphy, a Committee of three was appointed to prepare a preamble and resolutions, expressing the sense of this Society concerning "Circular No. 6" of Surgeon-General Hammond, (being the famous calomel and tartar emetic order.) Drs. Murphy, Weber and Metz that Committee. Pending its adoption, animated remarks were made by Drs. Murphy, Robt. Thompson, McBride, and others.

Adjourned until to-morrow morning.

SECOND DAY'S SESSION.

9 o'clock A. M.—Dr. Kincaid, the President, in the chair.

The minutes of yesterday's proceedings were read, and after some verbal amendments, adopted.

Dr. Conklin introduced Dr. R. E. Houghton, of the Indiana State Medical Society, who was, on motion of Dr. Crume, elected an honorary member of the Society, and was invited by the President to take a seat with us and participate in our proceedings. Dr. Houghton responded in a neat and pertinent address.

Dr. M. Dawson offered the following:

Resolved, That the thanks of this Society be, and are hereby tendered to the retiring officers for the able, dignified and courteous discharge of their several duties.

Adopted.

The Committee on Ethics reported back the papers in the case of Dr. Crook, for the action of the Society.

On motion of Dr. Murphy,

Resolved, That the action of the Montgomery County Medical Society be confirmed, and Dr. Crook be declared expelled from this State Society.

A warm debate followed, in which Drs. Murphy, Hamilton, Stevens, Andrews, Gans, the President and others participated. At length the motion of Dr. Murphy was withdrawn, and the whole matter was, on motion of Dr. Kyle, referred to the Committee on Ethics, with instructions to report immediately after dinner. The President appointed Drs. Reisinger, Andrews and Kyle, Committee on Ethics *pro tem.*

On motion of Dr. Stevens, Dr. Landon was appointed Treasurer *pro tem.* in the absence of Dr. Thompson.

On motion of Dr. Hamilton, the ladies were invited to be present at our sessions.

The reports of Special Committees were now called for, and Dr. Gans proceeded to read his report on Obstetrics, being chiefly devoted to the consideration of galvanic electricity as a parturient agent.

The paper was discussed by Dr. Robt. Thompson, Dr. Mitchell, Dr. Russell, Dr. Gans, Dr. Leonard, and Dr. Houghton of Indiana, and, on motion, referred to the Committee on Publication, with instructions to print, and the thanks of the Society extended to Dr. Gans for his able report.

Dr. Mitchell stated in his remarks that he was prepared to confirm the views of Dr. Gans from his own private experience, gave the particulars of an extreme case of uterine hæmorrhage, in which he used electro-magnetism with prompt relief, together with other confirmatory experience.

Dr. Gans hoped it would not be sufficient to read a paper and have it printed, but that each member would be thereby stimulated to give his own observations, and proceeded to give the details of several cases in obstetric practice, illustrating the views of his report.

Dr. Leonard wished to know of Dr. Gans if he regarded the contraction produced by electricity a *permanent* contraction, or does relaxation occur with the removal of the poles of the battery.

Dr. Gans replied that the contraction was an imitation of natural pain, and the agent was at hand to continue or renew at pleasure or necessity, or while the necessity continues.

Dr. Hamilton moved that Dr. Gans be continued to report at our next annual meeting his personal experience in the use of electro-galvanism in obstetric practice.

The President read the following communication from Dr. M. B. Wright, Chairman of the Committee on Prizes for Prize Essay of last year.

CINCINNATI, June 15, 1863.

DR. RUSSELL—*Dear Sir:* It is possible I may be prevented from being with you at the present session of the State Society, and I write hastily to say that the Committee on Prize Essay and Medal have deemed it best not to procure a medal at the present time in consequence of the high price of gold. It is to be hoped that before the next meeting of the Society a medal may be procured, creditable to the Essayist and the Society.

Respectfully, M. B. WRIGHT, Chairman of Committee.

The Committee on "Circular No. 6" of Surgeon-General Hammond, appointed yesterday, presented through its Chairman, Dr. Murphy, the following report:

The Ohio State Medical Society has read with profound regret Circular No. 6 of W. A. Hammond, M.D., Surgeon-General, U.S.A., in which he orders that calomel and tartar emetic shall be stricken from the supply-table of the army. This Society can not accept the statement made in the order, that innumerable cases of ptyalism and mercurial gangrene have been observed in the army, as the result of the injudicious use of calomel. Many of the members of this Society have had extensive observation in regimental and general hospitals, and have not observed innumerable cases of ptyalism, nor any case of mercurial gangrene. It is believed that from statistics, already collected since the publication of Circular No. 6, the statement may be made that calomel and tartar emetic have not been used to the injurious extent as set forth therein.

This Society can not resist the expression of its strong disapprobation of the Circular as unjust and untrue. In fact, it is a virtual endorsement of the false charges which have been made against the scientific profession by the representatives of the various empyrical systems of medicine. The regular profession has always claimed the right to use any remedy that clinical experience has proved to have therapeutical power. To forbid the use of a remedy because it has been abused is to forbid the use of almost all remedies. The true course is to remove the surgeon who does not manifest skill or judgment in the administration of remedies.

This Society feels that Dr. Hammond has done great injustice to the profession in this State, and particularly to those who are now serving in the army. With few exceptions, all surgeons and assistant-surgeons from the State of Ohio have been submitted to a rigid examination as to their mental, moral and physical qualifications. This Society was instrumental at the beginning of the war in having the State Medical Board of Examiners of surgeons and assistant-surgeons appointed, and the members of this Society have insisted that no one should be appointed without an examination.

The Society believes that the surgeons and assistant-surgeons from this State are well qualified, and that Circular No. 6 not only implies that they are not qualified to administer safely two remedies, but raises a doubt in the public mind as to their general skill or ability, and for this reason is not only untrue and unjust, but cruel.

This Society, therefore, respectfully and firmly protests against the statement of Circular No 6, as being untrue, and still further, as being at variance with the philosophy and progressive spirit of the legitimate profession. Therefore,

Resolved, That Dr. W. A. Hammond be requested to revoke Circular No. 6, and place calomel and tartar emetic again on the supply-table.

Resolved, 2d, That this Society will not be satisfied with anything less than a revocation of the order.

Resolved, 3d, That in the event of the refusal of the Surgeon-General to comply with this request, that he is hereby requested to resign.

Resolved, 4th, That a copy of this preamble and resolutions be sent to the Governor of Ohio, Senators Sherman and Wade, the President, Secretary of War, and the Surgeon-General of the United States.

Amended additionally by Dr. Hamilton:

Resolved, 5th, That Drs. Jno. A. Murphy, G. C. E. Weber and A. Metz be a Committee instructed to report to the American Medical Association that this Society demands the speedy trial and expulsion of Dr. W. A. Hammond, for the gross injustice done the profession of medicine by his foolish and quackish order, No. 6.

The subject was discussed at length, with earnestness and dignity, by Drs. Hamilton, R. Thompson, Gans, West, McBride, Kincaid and others.

Dr. McBride offered the following preamble and resolutions as a substitute for the report of the Committee:

Whereas, We have reason to believe that in consequence of the asthenic and scorbutic types of disease in our army, and that from the necessity of the case many inexperienced physicians, and a large number of the various tribes of quacks, such as Eclectics, Homœopathists, etc., etc., have got into the army as surgeons, and that with the types of disease prevalent, the injudicious use of mercury and antimony by these classes of men would be likely to cause more damage than the aggregate amount of good accomplished by these remedies in the hands of the judicious; and,

Whereas, The Surgeon-General, seeing this to be the case, has ordered the non-use of calomel, the mercurial most liable to abuse, designing thereby no reproof to the scientific surgeon, but a restraint upon all sorts of pretenders, for the good and efficiency of the army; therefore,

Resolved, That we highly approve of the designs and patriotic motives of the Surgeon General in issuing General Order No 6.

Resolved, That the issuing of said order and a general acquiescence in the same will have the effect, not only to save the health and lives of some soldiers in the army on whom it was alone designed to operate, but to elevate the character of the medical profession, both in and out of the army.

In the midst of the discussion, the Society took a recess for dinner until 3 o'clock P. M.

Afternoon Session.

The Society resumed the debate on the resolutions under consideration before recess. Drs. Noble, Houghton of Indiana, Kirtland, McBride, Hamilton and others continued the discussion.

Dr. McBride withdrew his substitute, and read a written statement of his views, disapproving the tenor of the Circular, but doubting the propriety of extreme language in our resolutions of disapproval.

The resolutions and preamble of the Committee were taken up separately, and unanimously adopted.

Dr. E. B. Stevens read his paper on New Remedies. On motion, referred to Committee on Publication, with instructions to print, and requested to continue on the same Committee to report at some future meeting, with the thanks of the Society.

Dr. Russell offered the following:

Resolved, That in the opinion of the State Medical Society, it is time our Legislature should adopt measures to erect an Asylum for Inebriates in our State.

Resolved, That an opportunity now be afforded for members of this Society to submit donations to this worthy object, which shall be binding if this State shall make an appropriation of $20,000 or more, for such noble charity before the expiration of the next two years.

Resolved, That the President of this Society is requested and authorized to appoint one regular physician in each County of the State, who shall be solicited to procure subscriptions from our medical brethren in each County, ıd exert all laudable efforts in his power to enlist the energies of our Sena- rs and members of the next Legislature, as may be practicable for the pas- ge of such laws as shall effect this object at an early day.

The Committee on Ethics made the following report:

Your Committee beg leave to report that in view of the evidence before em, they believe it to be their duty to sustain the action of the Montgomery ›unty Medical Society, and ask to submit the following resolution:

Resolved, That Dr. Crook be expelled from this Society.

J. S. Reisinger,
H. S. Conklin,
F. M. Andrews.

On motion, the report accepted and adopted.

Dr. Hyatt moved that five hundred copies of the Constitutions and ye-laws and Code of Ethics be published for the use of the State ɔciety, and that the Treasurer be instructed to send a copy to each ember of the Society as soon as published.

A charge of non-professional conduct was preferred against Dr. ruwell, of Damascoville, and, on motion, it was referred to the Com- ittee on Ethics.

On motion of Dr. Scarff, when this Society adjourn, it adjourn to eet at Cincinnati, on the third Tuesday of June, 1864. Amended to ad White Sulphur Springs, instead of Cincinnati.

Dr. M. Dawson offered the following:

Resolved, That the thanks of this Society be tendered to Andrew Wilson, ›q., of the White Sulphur Springs, for the use of the Hall and other accom- odations afforded the meetings of the Society, as well as the courtesy and tention we have received as his guests.

On motion, the Society took a recess until to-morrow morning, at o'clock.

Third Day's Session.

9 o'clock A. M.—Minutes read and approved.

Dr. Leonard offered the following, which, after some remarks and ıinor amendments, were adopted:

Whereas, it is known that the Secretary of War has appointed one Doctor ilson, a Homœopathic pretender, as Examining Surgeon in the Board of En- ›llment, in the Fourth Congressional District, in preference to honorable and ›gh minded men of the regular profession; therefore,

Resolved, That that appointment, as well as all others of like character, is an ıtrage on the people of the District, unjust to the profession of medicine and ıe advancement of science, and prejudicial to the public service.

Resolved, 2nd, That the Secretary be directed to send a copy of this preamble ıd resolution to the Secretary of War, asking his removal, through Gov. Tod ıd Col. Parrott, Provost Marshal of this State.

Dr. Murphy offered the following:

Resolved, That the members of this Society and the profession of the State at ›rge be requested to exact from all students the qualifications as to peliminary lucation laid down by *the American* Medical Association.

Resolved, That the President appoint a committee of three members, to be present, with the permission of the several faculties, at the final examination of the candidates for the degree in each of the four medical schools of the State.

Resolved, That the schools of the State be requested to raise their fees so as to amount in gross to one hundred and five dollars.

And proceeded to address the Society at considerable length on the whole subject of medical schools, medical students, medical education, etc., etc. Drs. Scarff, Russell, Kirtland, Spees, Hamilton and others participated in the debate. The resolutions were adopted.

Dr. N. Dalton proceeded to read a volunteer paper on "Arrest and Cure of a case of Mollites Ossium by the use of Phosphate of Lime and Phosphoric Acid, with remarks." On motion, referred to the Publication Committee with instructions to print, and the thanks of the Society to the author.

Dr. Hyatt proceeded to give a volunteer contribution "On the use of Hydrocyanate of Iron in Epilepsy, with cases." On motion, referred to the Committee on Publication with instructions to print.

Remarks were made by Dr. Stevens, giving some personal experience adverse to the beneficial effects of the remedy; and by Dr. Kincaid, especially giving his experience in the good effects of cannabis indica and belladonna in epilepsy.

Recess.

Afternoon Session.

The question of the existence of a diploma plate or parchments for this Society was raised by Dr. Stevens, and after some remarks by several of the old members, on motion, Drs. Gans, Stevens and Murphy were appointed a committee to make all necessary inquiries on this matter, prepare a design of a plate, if necessary, and report the expense, at the next meeting.

Dr. McBride read a volunteer paper on certain adipose tumors. Referred to the Committee on Publication with instructions to print.

At different times during the session of the Society the Committee on Admissions reported the names of the following as suitable persons to become members of the Ohio State Medical Society, who were thereupon duly elected: Drs. T. L. Neal, Dayton; Robert Woody, Eaton; A. Beach, Belleville; C. D. Case, Lewis Centre; C. Gunzaulus, Mt. Liberty; Joel Morse, Cleveland; R. E. Jones, Gomer; A. Potter, Wileshire; Alleyne Maynard, Cleveland; J. J. Hamill, Newark; S. J. Spees, Lynchburg; J. C. Brown, Urbana; Milton Mitchell, Mansfield; L. J. Pease, Williamsburg; J. H. Buckner, Cincinnati; J. T. Reid, Fairfield; and John Turnbull, Xenia.

The Finance Committee made the following report:

The Committee on Finance respectfully make the following report: Having examined the accounts, papers and vouchers of the Treasurer, Dr. J. B. Thompson, we find the same correct, the exhibit presenting the following statement:

Balance in Treasury from last year	$ .11	
Postage stamps and stamped envelopes	3.93	
Initiation fees and fees of assessment, and sales of Transactions	263.02	$267.06
Expenditures		233.95
Balance in Treasury		$33.11

Your Committee take great pleasure in expressing much gratification in the very satisfactory manner in which the Treasurer has performed the arduous duties of his office, and unanimously recommend the adoption of the report.

C. P. Landon,
J. P. Kirtland,
W. D. Scarff.

On motion, adopted.

The subject of obituary notices came up, and Dr. Landon stated that he had been unable to collect any materials of value; and, on motion, the members present were requested to give personal reminiscences of any deceased members of their acquaintance. Dr. Hamilton gave touching and appropriate notices of Drs. Pierce, Carley and Spillman. Dr. Smith noticed still further the deaths of Dr. Pierce and Dr. McMeens.

The President announced the following committees for the ensuing year:

STANDING COMMITTEES.

Executive—M. Dawson, E. Hyatt, J. G. Rogers, J. P. Kirtland, R. Thompson.

Finance—D. S. Gans, R. L. Sweney, A. Cary, D. Noble, T. J. Mullen.

Publication—E. B. Stevens, N. Dalton, J. J. Hamill, J. W. Hamilton, W. W. Dawson.

Medical Ethics—J. S. Reisinger, F. M. Andrews, A. Metz, H. S. Conklin, W. C. Hall.

Medical Societies—P. Beeman, A. McBride, W. L. Peck, Wm. Mount, G. F. Mitchell.

SPECIAL COMMITTEES.

Surgery—N. Dalton.
Diseases of the Eye—A. Metz.
Obstetrical Surgery—M. B. Wright.
Practice of Medicine—J. A. Murphy.
Obituaries—M. Dawson.
Electricity in Obstetrics—D. S. Gans.
New Remedies—E. B. Stevens.
Insanity—R. Gundry.
Asthma—T A. Reamy.
Pancreatic Disease—J. P. Gruwell.
Diphtheria—P. Beeman.

Delegates to Indiana State Medical Society—H. S. Conklin, J. A. Murphy.

Delegates to American Medical Association—W. C. Hall, Fayetteville; A. Metz, Massillon; J. G. Rogers, New Richmond; D. S. Gans, J. A. Murphy, E. B. Stevens, G. C. Blackman, J. L. Vattier, Geo. Fries, B. F. Richardson, J. Graham, W. W. Dawson, M. B. Wright, Cincinnati; F. M. Andrews, J. C. Denise, T. L. Neal, C. McDermont, Dayton; J. W. Russell, Mt. Vernon; W. L. Peck, Circleville; Wm. Mount, Cumminsville; F. T. Hurxthall, Massillon; L. T. Pease, Williamsburg; G. F. Mitchell, Mansfield; J. S. Reisinger, Gallion; P. Beeman, H. S. Conklin, Sidney; Abel Carey, Salem; J. W. Hamilton, John Thompson, S. M. Smith, John Dawson, Columbus; C. P. Landon, Westerville; N. Dalton, Logan; G. W. Boerstler, Lancaster; M. Dawson, Royalton; R. L. Sweeney, Marion; E. Hyatt, Delaware; A. McBride, Berea; T. J. Mullen, New Richmond; B. B. Leonard, West Liberty; C. C. Hildreth, Zanesville; E.

Vanatta, New Lexington; D. Noble, Sugar Tree Ridge; T. W. Gordon, Georgetown; G. C. E. Weber, E. Sterling. J. A. Sayles, C. A. Terry, A. Maynard, Cleveland; W. B. 'Scarff, Bellefontaine; C. Falconer, Hamilton; C. Cochran, Sandusky; S. J. Spees, Lynchburg.

Correspondence.

Letters from Army Surgeons in Tennessee.

TRIUNE, TENN., June 4th, 1863.

DR. STEVENS—*Dear Sir* :—From occasional glimpses of your journal, I see that the army surgeons are not very profuse in their favors to your pages. I have felt some compunctions on this score, but I take it that it is wise not to rush into print. Our training, etc., in army life is too recent to make mature deductions, or even to arrive at just conclusions on important subjects. It is true that some surgeons say that they observe no difference between the treatment of diseases in camp, from that of civil life ; and as a prelude to this, assert that camp diseases are in no way different from those in ordinary practice. But this does not comport with the majority of observers I have conversed with on this topic. They acknowledge a difference, either of mode, type, or kind. Our fevers are, some of them, peculiar in their nature. I can not say that I have seen a perfectly pure case of typhoid, such as are observed at home. There is a difference, for example, in the appearance of the tongue. It is rare that you ever see in the fevers of camp a furred tongue. It is smooth, red, and glossy from the first, with very commonly a fissured appearance. Then the dejections are not of that uniform liquid brown usually seen in typhoid. More commonly they are thin as water, and of almost every tint, or else there is no diarrhœa at all. In these instances, instead of there being an increased susceptibility to the action of cathartics, there is just the opposite.

The diarrhœa of camp is the pest of the soldier. At our meetings of the surgeons of Gen. Granger's corps, this subject has been up for free and full discussion. It is singularly obstinate to treatment. Some of us thought ere we entered the service that we felt equal to this *loose* subject, but have now to confess our inadequacy. Sudden deaths from the disease are no uncommon occurrence, and they are so sudden as to imply death from heart, or brain lesion. Post mortems have shown that the lesion is in the heart, involving deposits of fibrin on the columnæ carneæ and chordæ tendineæ. They are remarkable depositions, in some instances being from two to three inches in length, about the size of a goose quill, and larger at the free extremity than in the attached. There is no evidence in any whom I have examined, of endocarditis, and its formation is somewhat mystical. It appears from the statements of others not to be confined to diarrhœa, but to be found in nearly all classes of cases in army life. Surgeon Varian, U.S.V., tells me that he invariably finds it in deaths from diarrhœa. The omentum in all I have examined was extensively diseased, the mesenteric glands enlarged and the dimensions of omentum reduced nearly two-thirds. The stomach not much diseased, but the colon and ileum giving evidence of active inflammation. I have seen no ulceration, but in one instance the mucous membrane of the colon was covered with fluid granulations, not entire, but in detached portions.

The recent order of the Surgeon-General in reference to calomel and tartar emetic has created considerable feeling, and indeed I must confess that there is ground for it. We are not by the terms of the order considered trustworthy—must not be trusted with edge tools for fear we hurt some one. It is difficult to think that the abusers of the remedy were not dismissed, instead of the remedy itself, for from the reports he receives he must know who they are. I have been receiving reports from six regiments for some time, have visited their hospitals weekly, and had frequent opportunities to observe cases in general hospitals, but I must say that I have the first case of the abuse of calomel to observe. I have never seen a case of ptyalism in the army, and only three of slight mercurialization as manifested by tenderness of the gums and fetid breath. As for mercurial gangrene, I have not seen a single case, and have yet to see the surgeon who has seen it in the army. As for tartar emetic, it is seldom used by army surgeons. But why not exclude blue mass, hydrarg. cum creta, iodide mercury, etc. The whole thing looks mystical, but seems to indicate a very large tub to a very small whale. And yet there are signs that point to the true solution. At the Medical Purveyor's, on the shelves of army surgeons, you will see quite a free sprinkling of Bennett's Practice. In fact, he seems to be the favorite author with the powers that be.

The health of the army here is quite good, and the morals of the men of a high order. While located in Franklin, Tenn., Lieut.-Col. F. Hamilton, Medical Inspector of this department, paid a high compliment to the sanitary condition of Gen. Gilbert's command. He had been with the Army of the Potomac, and also with that of the Cumberland, but this part of it, including Gen. Baird's, was in the best sanitary condition he had ever seen. A generous rivalry on those points is being nurtured, which leads to useful emulation.

The Sanitary Commission has a warm friend in every army surgeon here—not that he is mean enough to eat and drink what is sent for the sick, but because his poor sick friend in the lonely field hospital is made to rejoice at the delicacies, nay, necessaries, by them so generously provided. And not only so, but when scurvy threatened our ranks. potatoes were freely given us by that noble Commission. Their acts brighten the dull eye of the invalid, restore animation to the bloated, salt-fed soldier, and lighten the duties of the surgeon. May they be prospered in their heavenly work. You can not get a soldier who has been sick out here to say that he has not partaken of good things from the U. S. Sanitary Commission.

Yours truly, J. R. BLACK,

Surgeon One Hundred and Thirteenth Regiment and Medical Director Gen. Gilbert's Com'd.

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CAMP DRAKE, Thirtieth Regiment, Ind. Vols.,
Near Murfreesboro, Tenn., May 26th, 1863.

MESSRS. EDITORS:—It is so long since I corresponded with the *Lancet and Observer*, that I thought I would pen you a few observations from the Army of the Cumberland, to keep you in remembrance of a former occasional correspondent.

I was stationed at Nashville during the past winter, and was observant of a few things in the hospitals there. After the battle of Stone River, the hospitals were crowded with wounded, and very many cases of a grave character, involving the thigh, arm and various parts of the body, were brought in from the battle-field. The cases that could not be moved were left at the Division Hospitals on the field. The hospitals at Nashville were under the best of management, medical and hygienic.

Amputations were thought to do best by leaving the flaps open, and allowing them to heal by granulation. When an attempt was made to bring about union by the first intention, by closing the flaps, the patient frequently died from pyæmia. At the field hospitals a number of cases of comminuted fractures of the extremities were permitted to remain without operations, and afterward sent to the hospitals at Nashville, where they were operated on. Nearly all the secondary amputations died from pyæmia, erysipelas and hospital gangrene. The wards of the hospitals were daily fumigated with the compound solution of bromine, and it was thought with the effect of preventing the spread of erysipelas and hospital gangrene. Iodine was extensively used in the treatment of erysipelas, the parts being kept thoroughly painted with the alcoholic tincture, tinct. chloridi ferri and mercurial alterants being administered internally. The treatment was very successful. Incisions were practiced at some of the hospitals in erysipelas, at others not. A case came under my observation, which exemplifies in a striking degree the superiority of the treatment by incisions. A surgeon in passing through his ward, had his attention called to an abscess on the anterior part of the tibia, the sequence of erysipelas. On opening it, it discharged over a quart of pus, had burrowed under the fascia, producing sinuses, which would not speedily close. Such consequences did not follow the practice by incisions.

Observation has satisfied me that wounds from the projectiles used in modern warfare are but little amenable to conservative surgery. The bones are so completely comminuted, and the soft parts lacerated in such a manner, that nothing short of amputation will in the great proportion of instances save life, and the sooner that amputation is performed, the greater is the probability of recovery. The diseases of the army were all marked by asthenia, requiring from the beginning the use of stimulants. Pneumonia was common during the winter, and still prevails to some extent. The most successful treatment was stimulants and tonics—brandy, quinine, beef-essence and small doses of mercurials. It was remarkable how quickly cases recovered under this treatment. There seemed to be among practitioners a neglect of the use of the stethoscope as a means of accurate diagnosis. It is true, that in order for a physician to make the stethoscope available, it requires a great deal of practice and patient study, but certainly the end to be attained by an instrument so infinitely valuable, is worthy the study of a lifetime.

The number of deaths from rubeola and its sequelæ excited my attention, the mortality from it alone being nearly as great as that of typhoid fever, pneumonia, or chronic diarrhœa. From the investigations that I was able to make, a latent form of pneumonia followed the measles, especially where the patient had been exposed to atmospheric changes, such as is usual to camp life. The early stage of the disease generally passed unobserved, on account of the absence of urgent symptoms, so that the physician's attention was not called to the condition of the lungs until hepatization, and frequently suppuration, had ensued. In the cases that came under my observation, there were neither pain nor rust-colored sputa, characteristic of pneumonic disease. The patient generally continued on his feet till after the lung becomes hepatized. Frequently both right and left lungs were simultaneously attacked, and the patient suddenly died from want of blood aerations. This occurred in one case, in which a post-mortem revealed both lungs infiltrated with pus.

Practitioners have been too much accustomed to regard rubeola as a disease of minor importance, and dismiss the patient too early from under our vigilance. In probably no disease is more disastrous consequences apt to follow inattention to the conditions of our patient, than in this. Frequent examinations of the patient's condition ought to be instituted, and a thorough restoration to health is necessary, before the physician loses sight of the case. The treatment adopted in cases of this character was stimulant and tonic—quinine, brandy, expectorants, etc. There is probably no disease that more completely breaks down the healthy condition of the blood than measles, and rouses into activity any latent predisposition to tuberculosis and other diseases of a degenerative character. Another important sequel of measles is aphonia. It was of frequent occurrence. The fauces were red and inflamed-looking. In all the cases of aphonia that came under my notice, a solution of nitras argenti, twenty grains to the ounce of water, applied with a probang, twice a day, was the most successful remedy. I am very favorably impressed with the treatment of measles by inunction, to prevent unpleasant sequelæ. It acts as a coating to the skin, and prevents the influence of atmospheric changes.

We are camped on the east bank of Stone River, within a short distance of the battle-ground. Our diseases may all be attributed to malaria. We have remittents, intermittents, diarrhœa, dysentery, and neuralgia. They are very amenable to the customary treatment. Diarrhœa is quite common, and seems to depend on functional hepatic derangement, mercurial alteratives acting almost like a charm in restraining the course of the disease.

You may hear from Stone River again, should any medical items of importance happen to spring up here. I am afraid that science will not be profited as much by the war as it might be.

Respectfully yours, DAVID HUTCHINSON,
Surgeon Thirtieth Regiment, Ind.V.

Circular No. 6, and the Profession.

Messrs. Editors:—

Surgeon-General Hammond's Circular No. 6 has stirred the deep waters of the medical profession, and brought up some sediment that makes the stream appear somewhat riled, and I sometimes think my olfactories catch an odor that warrants the fear that the whole turbid mass is not entirely sound.

Your issue for June current, and the daily papers of June 2d, amply testify to a degree of excitement among some, at least, of the medical men in Cincinnati, by no means moderate, and if I may be allowed the expression, not at all modest.

It may seem like temerity for a man to write an article in defence of a point already condemned by a majority of his *confrerès*, and more particularly to publish it in the pages of a journal whose conductors have editorially sustained the action of those who assail, and added, most pointedly, their own condemnation to that of others. But "thrice is he armed who hath his quarrel just," and, moreover, it would be servility to yield one's opinion because a large proportion of his fellows had raised the "hue and cry" in opposition, and it would be cowardice not to express one's convictions of truth and justice because numbers appear to disapprove. An expression of my opinion of the policy of issuing the Circular is not necessary to my present object, nor is it my purpose to defend the Surgeon-General from the aspersions sought to be cast upon him. I only propose to point out the unjust and injurious manner in which the opposition to the Circular has manifested itself—unjust to the profession and injurious to the public.

A legitimate consideration of Circular No. 6 would embrace two leading points, viz.: 1st. Have calomel and tartar emetic done any mischief in the army? 2d. Can the diseases incident to the army be well treated without calomel and tartar emetic? Abstractly, there is nothing else in the Circular for a philanthropic scientist to discuss. How the Surgeon-General was appointed; what influences were at work to accomplish that event; and who was therefore overslaughed or misappreciated, are not in the issue; nor is it material whether the Surgeon-General was formerly a surgeon in the service, an assistant-surgeon, or a civil practitioner; and surely it matters not whether the Inspectors were selected from Massachusetts or Missouri, so far as the facts are concerned.

The Surgeon-General says he has official information of the abuse of calomel, and you assert that the evidence upon which he rests is unreliable, because of the character of the inspection you witnessed in the Cincinnati hospitals; and his statement false, because in two hospitals having five thousand patients there was but one case of ptyalism; and the Medical College meeting broadly declare falsehood in the Surgeon-General, because the Cincinnati profession "have had an opportunity to observe" twenty-five thousand sick and wounded soldiers, and the "*records* show not more than nine cases" of salivation. It quite surprises me that you or the meeting should be willing to put forth such negative testimony, even if it were tenfold greater, as sustaining a charge of falsehood against the Surgeon-General, who professes to have positive official testimony of what he asserts. The astute judge who discharged a culprit, because only two witnesses swore they saw him steal a goose, while four swore they did not see him steal it, was in better position than you or the meeting, for he had, at least, *quantity* on his side, but you and they claim only to have direct cognizance of five thousand and twenty-five thousand patients, while it is probable the Inspectors' reports cover a million. Your attempted invalidation of the whole of the Inspectors' reports, by detailing the manner in which one or two of them discharged their duty in Cincinnati, should have precisely the opposite effect from that intended, for it appears quite evident they were not sent out "to hunt spiders," and if they found an abuse of calomel with their careless style of observation, it is testimony that the abuse must have been very gross, or they would not have noticed it. But we do not need the evidence of the Inspectors to establish the abuse of calomel. You saw one case of ptyalism, and the Medical College meeting report the "record" of nine cases of salivation. Certainly these are enough of themselves to establish the abuse of some mercurial. And, further, in a recent large meeting of doctors, a distinguished member of the profession from New York detailed a horrible case of gangrene of the face in a young soldier sent to a New York hospital from the army, caused by calomel administered by a military surgeon; and another party has lately detailed the condition of a military hospital wherein a large proportion of the patients were mercurialized. Both these narrators were violently opposed to the Circular, claiming that the proper remedy for the evil was to suppress the abusing surgeons, not the abused calomel.

There is, therefore, abundant evidence of the most trustworthy character that calomel is abused by military surgeons, and the coarse and wholesale charges of falsehood against the Surgeon-General were not only not warranted by the facts, but were also quite unprofessional and undignified.

2d. Can diseases incident to the army be well treated without calomel? I do not suppose there is a physician, justly entitled to the appellation, anywhere, who believes that calomel is a necessity in the practice of medicine in any civilized country. It may be a convenience, but with the other articles of the materia medica accessible, this is the highest position that can properly be claimed for it. The Surgeon-General states it very mildly when he says "modern pathology has proved the impropriety of the use of mercury in very many of those diseases in which it was formerly unfailingly administered." If modern pathology has not established this much, at least, I do not know anything it has established. You insinuate that the Surgeon-General is not old, and has not had clinical or other experience to justify his assumption of pathological knowledge, but your position is not well taken, even if it were in good taste. If your theory were true, no graduate could be supposed to know anything of pathology (and, by a parity of reasoning, nothing of any professional science resting upon observation) until he had acquired it by personal experience. But in this, as in other departments of knowledge, there are two sets of disciples: one set who devote their time and talent to original investigations and experiments, and another set who take the recorded experience of the various original observers, and after comparing and arranging the whole of the facts obtained, weave them into a web of knowledge. The teachings of this latter class are always, for the time being, the standard of science in the department to which their attention is given. It is quite clear, therefore, that the Surgeon-General *might* be a good *pathologist* without ever having spent one hour in the experimental study of *pathological anatomy*.

The gist of Circular No. 6 is, that the Surgeon-General has ascertained by official reports in his office that calomel has been improperly used by army surgeons, and by his pathological, and resulting therapeutical knowledge, he is convinced that neither calomel nor tartar emetic is necessary for the proper treatment of army diseases. From these premises he believes there is no doubt but that their evil effects outweigh their good results, and, therefore, as the only means he has of abating the evil, he strikes the articles from the supply-table of drugs to be furnished for army consumption. If the Surgeon-General has an honest conviction that he properly appreciates the drugs in question, it would puzzle a casuist to tell how he could do less than he has done and not be derelict of duty. So far as appears upon the face of the Circular itself, or in anything presented by those who have assailed it or its author, the affair must occupy exactly this position in the estimation of every candid and unprejudiced inquirer.

How any rational individual can torture such action into an insult to any professional man, in the army or out of it, is beyond my powers of divination. That there are some medical officers in the army who do not know how to use these potent drugs is certain, and that some means of preventing the use of these remedies by such officers should be devised is also certain. Now if the only, or even the easiest and quickest, way to accomplish this is to stop the supply to all, the wise and unwise alike, let it be done, and with the more satisfaction if detriment arise to none by the act. The few are thus effectually barred of this source of mischief, and the many should rejoice that it has been done, and nothing essential of their own means of doing good thereby disturbed. Whenever any man or assemblage of men shall show, satisfactorily, that more harm has resulted from the misuse, than benefit from the proper administration of opium, alcoholic stimulants, quinine, surgical instruments and "pernicious and deadly drugs obtained from the vegetable kingdom," the Surgeon-General will, I make no doubt, immediately "issue Circular No. 7, forbidding their use," or if he does not, I will join in an effort to depose him. Until such results are proven to follow the continuance of these articles as supplies for the army, they will not belong to the same category as calomel and antimony, nor will arguments referring them to such connexion have any weight with thoughtful people.

Both the editorial remarks and the proceedings of the Medical College meeting make a strained and offensive effort to associate the Surgen-General with ignorant and irregular practitioners of medicine, and to class his Circular with the senseless denunciation that charlatans make against many active remedies used by educated physicians. It is almost incomprehensible that medical men having any regard for the dignity of their profession, and the welfare of their kind, should allow themselves to appear before the public with the insinuation that the brief and pointed Circular of the Surgeon-General, itself stating its foundation on designated scientific data and official reports, is of a piece with the verbose and baseless generalities of quacks and nostrum venders. Yet such is the lamentable fact; but I have an abiding faith that time and the sober second thought will bring repentance and recantation as "the smallest atonement" they "can make to an insulted and outraged profession."

Professional affairs are usually discussed by professional men in professional journals, but the "Regular Medical Profession of Cincinnati" have seen proper to ignore established ethics by holding indignation meetings about professional matters and publishing their proceedings in the daily lay papers. Scientific men desiring to accomplish a legitimate purpose are apt to assemble in an unostentatious manner and state the points they make clearly and distinctly, together with the facts upon which they rest, then lay the whole before the authority having power to further the end sought to be obtained. What a contrast between this and the course pursued by the meeting under consideration! The report adopted is a compound of bold assumption, coarse denunciation, gratuitous charges of falsehood, and odious comparisons, such as might appear well enough if emanating from a ward meeting of pot-house politicians, but such, I venture to say, as never before appeared as the result of the deliberations of an assembly claiming to represent a learned and reputable profession. Witness the following paragraph:

> "In conclusion, the civil and military medical men of this city assure the people of the West and the nation, that so far as they can judge from the extended observation on battle-fields, in camps and in hospitals, the statements of the Surgeon-General are utterly false and unfounded, and we will add that, from facts within our knowledge in regard to his administration, we believe him to be alike unfaithful to the soldier and to the sacred trusts committed to his hand by the Government."

And all this without one jot or tittle of anything that any sane man could look upon as a sustaining fact. The parties uttering such direct charges of falsehood and malfeasance in office of the head of one of the most important bureaux in the government, should be put to the proof before some tribunal having power to depose and punish the Surgeon-General if the charges were sustained, but, failing in the proof, the parties making the charges should be arraigned under Gen. Burnside's Order No. 38, revivified and animated with its original vigor. No men, claiming to represent what they do, should be permitted to do what they have done to sow discord and discontent among soldiers in the field and citizens at home, without receiving a suitable rebuke. But as the authorities are not likely to take cognizance of the act, "let every medical society, and if there is no medical society, let every lover of his profession, every lover of scientific progress and of the broad, liberal spirit of legitimate medicine, rise up and protest against" such a stigma on the fair fame, such a prostitution of the good name and loyal reputation of the Regular Medical Profession.

I would not discourage, nor object to, the closest scrutiny of Circular No. 6, or the widest discussion of its merits or policy, provided the inquiry be conducted subservient to common decorum, the dignity and standing of the profession, and the welfare of all. But I do not think the articles I am reviewing have been promulgated in subjection to such rules. They are pervaded by what appears to be a vindictiveness of assault, and bitterness of denunciation, altogether unlike the spirit that usually characterizes the discussion of professional affairs; looking in fact as if the authors for a long time "had nursed their wrath to keep it warm," the Circular of Surgeon-General Hammond affording the occasion for, not really being the cause of, this outbreak of intense feeling. J. F. HIBBERD, M.D.

Richmond, Ind., June, 1863.

Reviews and Notices.

Obstetrics, the Science and the Art: By CHARLES D. MEIGS, M.D., lately Prof. of Midwifery and Diseases of Women and Children in Jefferson Medical College at Philadelphia, etc., etc. Fourth edition, revised, with one hundred and twenty-nine illustrations. Philadelphia: Blanchard & Lea. 1863.

As a teacher in one of the most popular American schools of medicine, and as a writer of obstetrical works, Dr. Charles D. Meigs is one of our best known American obstetricians. He has his eccentricities of manner and expression which find their way into his books, and give to them a sort of peculiarity of character not entirely pleasant to many readers. Nevertheless, there is a spice even in his eccentricity, and there is so evidently industry in research and honesty of purpose, that we readily forgive that which is objectionable, and embrace that which is good.

His work on Obstetrics, of which the volume before us is the "Fourth Edition Revised," is a text-book with a large number of the profession in this country, and we are gratified that so excellent a work and so safe a guide is still so largely in favor as to demand again a new edition.

Dr. Meigs is one of the most positive men that ever taught medicine. His opinions on all questions that become in issue in the profession are clear and explicit.

Inasmuch as this work is already very familiar to the profession, and especially in consideration of the fact that we have heretofore reviewed it in the pages of this journal, it seems scarcely necessary for us to do more than call attention to the fact that a new edition is issued. Dr. Meigs is a scholar, and his writings are carefully polished, and display the taste and style of a man of culture. We feel gratified that the professional demand for good books is such as to stimulate publishers to issue within so short a time three such most capital works on obstetrics as those of Meigs, Cazeaux and Bedford.

For sale by Robt. Clarke & Co. Price $4.00.

A Manual of Minor Surgery: By JOHN H. PACKARD, M.D., Demonstrator of Anatomy in the University of Pennsylvania; with one hundred and forty-five illustrations. Authorized and adopted by the Surgeon-General of the United States Army for the use of surgeons in the field and general hospitals. Philadelphia: J. B. Lippincott & Co. 1863.

This little volume is designed as a convenient hand-book for the army surgeon. Its topics are embraced in thirteen chapters as follows: I. A description of a brief pocket-case, instruments, and dressings; II. The application of dressings; III. Arrest of hæmorrhage, sutures; IV. Surgical depletion; V. Anæsthesia; VI. Bandages; VII. Fractures; VIII. Dislocations; IX. Catheterization, injections; X. Foreign bodies; XI. Post-mortem examinations; XII. Disinfectants; XIII. Minor surgical operations.

These topics in all are embraced within the limits of a small volume of less than three hundred pages, and are copiously illustrated. Having said this much, perhaps we can with propriety say but little more, unless it should be to quote the following report made by the Board to whom was referred this volume for their opinion as to the propriety of adopting it in the medical department of the army:

"The Board appointed to examine and report upon the merits of a work on *Minor Surgery*, submitted by Dr. John H. Packard, respectfully report that they have carefully examined this work, both in manuscript and in proof-sheets, and are satisfied that it is a better text-book upon the subject than any of the treatises with which the American market has hitherto been supplied.

Signed by "J. H. BRINTON,
Surgeon U.S.V., President of the Board.
"J. J. WOODWARD,
Assistant-Surgeon U.S.A., Recorder."

For sale by Robt. Clarke & Co. Price $1.50.

Wooden Library.—A strange work is being carried out for exhibition at the Permanent Industrial Exposition, in Vienna. It is a wooden library; that is, a hundred octavo volumes, the covers of which are formed of wood. On the backs, which are formed from the bark, are inscribed the trees they are made from. Inside are specimens of the leaves, flowers, fruits, etc., of the trees.

Editor's Table.

☞ The office of the *Lancet & Observer* is removed to 319 Elm Street, between Ninth and Court. This point is convenient of access to strangers in the city; and it will afford us pleasure to see any of our friends, or the friends of this journal, at our new office.

The Ohio State Medical Society.—The physicians of Ohio held their annual holiday season at the White Sulphur Springs on Tuesday, Wednesday and Thursday, the 16th, 17th and 18th of June. In all respects, the meeting was an unusual success. The number in attendance was nearly double that of any recent meeting of the Society, and as a large proportion of the members brought their wives and families, the social element was more than usually prominent. A number of carefully prepared reports and volunteer papers were read, giving the material for an unusually large volume of Transactions, which we have every reason to expect will be issued very soon.

The discussion on the late order of Surgeon-General Hammond was earnest, dignified, but emphatic in its protest. We refer the reader to the published proceedings elsewhere for the resolutions.

The debate, also, on the resolutions of Dr. Murphy on the questions of medical schools, students and education took a wide range, and was participated in by the Society generally, and while it was courteous and kindly on all hands, there was a mutual expression of opinion on these subjects that we believe will do good.

The annual address of the retiring President, Dr. Russell, was able and appropriate. Dr. Kincaid, of Clermont County, is President elect for the ensuing year. A resolution was adopted, looking to a new order of things in the election of officers; to wit, the election to be so arranged as to time that the officers elect will serve at the following meeting of the Society, and not enter at once on their duties as heretofore.

The present charming locality, White Sulphur Springs, appears to meet the general preference of the members, and the Society again adjourned to meet there at our next annual meeting, and all the members parted with the hearty purpose of greeting each other next June again at the White Sulphur Springs.

As the Transactions will be placed immediately in the hands of the printer, money will be needed very soon, and the Treasurer, Dr. J. B. Thompson, of Columbus, hopes every member of the Society will remit the annual fee at once, and without further notice.

Meeting of the American Medical Association.—The late meeting of the American Medical Association was largely attended, taking all things into consideration. There were two hundred and fifty delegates present, representing seventeen States. The proceedings were very interesting, and we learn will make a respectable volume. The meeting will be of great service to the profession. The passage of the resolutions condemning Circular No. 6 of the Surgeon-General we regard as of great benefit. The adoption of the resolutions of the committee on medical education is also a matter of great interest to the profession at large. It is only by repeated efforts on the part of the Association and the various State Societies that the whole subject of medical education will be placed on its proper basis. The profession must be educated as to its necessity.

We can not forbear expressing our regret at the course of the editors of the *Chicago Medical Journal* in regard to the meeting of the Association. The editors seem to have been exercised to an unpleasant degree since the meeting of the Association was advertised, and have by no means been soothed or quieted by the meeting. We understand that the principal editor of the *Chicago Medical Journal* did not make his appearance in the Association ; at any rate, he took no part in the discussions. We suppose that this fact explains the following sentence, which we take from the editorial of the June number: "There never has been a meeting of the Association so generally ignored by the leading members of the profession of the country." In other words, as Drs. Brainard and Allen "ignored" the meeting, all the other great men "ignored" it. If we are not mistaken, gentlemen who think and write in such language of a meeting as respectable as that of this Association, will find before long that *some* leading men, and many very respectable ones, who were present, have *ignored* them. It was a matter of remark by *leading* members quite as distinguished as the editors of the *Journal*, that one, if not both, wholly absented themselves from the meetings.

In unison with the sentence already quoted, we find the following: "Its prominent act was a wholly gratuitous attack on the Surgeon-General of the army,—an action which in its animus and results can only tend to bring the profession into contempt." We like that. "Gratuitous" is good. To make a respectful protest against an order which is false in facts, unwise and unjust, is a gratuitous attack ! This, however is entirely consistent with the course of the *Journal* in depreciating the American Medical Association.

"Politics and the Canal Convention were more talked and considered than medicine." We do not understand how any man who loves his profession can have the face to publish such a sentence, even if it was true. We have been informed that the principal editor had much to do with appointing the meeting of the Canal Convention, and so arranged that it should meet at the same time the Association met. If this is so, it may be he wished the "Canal Conventi on more talked and considered than medicine."

The *Journal* glories over the fact that the Committees active in calling the meeting were not honored with one of the offices of the Association. It looks to us as if the editors were aware of the fact that neither of them could be elected to any one of the offices of the Association. Certainly, the Association in slighting "certain parties" to this "ill-timed call" did not honor those who stood back and "talked and considered" "Canal Convention" more "than medicine." If the editors find that their remarks on the meeting of the Association meet with the approbation of any large number of medical men, we are greatly mistaken. The spirit and letter of the article are undignified, unjust, and unworthy the position claimed by the editors of the *Journal.*

Instead of assisting in receiving the delegates, and making the meeting pleasant, the editors of the *Chicago Medical Journal* evidently stood aloof, and did all they could to direct attention to a collection of miserable politicians calling themselves a Canal Convention. They can not find that there was any number of leading men present, and, in one word, ridicule the Association, and every body who had anything to do with it. It does not reflect credit on the editors of the *Chicago Medical Journal* that the meeting accomplished no important object. It would have been in better taste for the editors of the *Journal* to have sunk their personal quarrels and hatreds, and have joined heart and hand in the meeting. This course would have reflected credit on them. The Association will live. There is no fear for it. Its next meeting will not be overshadowed by a Canal Convention, and we venture the remark that it will attract the profession as it has done in the past. It matters very little whether one or two medical journals and a few discontented men here and there may oppose it, it is the great Congress of the profession, to which a goodly representation will continue to be sent.

Vacancies in the Faculty of the University of Pennsylvania.—At the termination of the late winter session of this venerable school of medicine two of its oldest and most venerated teachers retired from their long and honorable public career: Prof. Samuel Jackson and Prof. Hugh L. Hodge. Prof. Jackson has filled the chair of Physiology in the University for thirty years. Dr. F. G. Smith is elected to fill the chair of Physiology vacated by Prof. Jackson, and Dr. Penrose is chosen to fill the chair of Obstetrics.

The Federal Sick.—The Northern armies are suffering terribly from sickness, notwithstanding the exertions of their able Surgeon-General, Dr. Hammond. A correspondent of the *Dubuque Herald* says that Dr. Russell, of Bowen's Prairie, Linn County, Iowa, a surgeon sent by Gov. Kirtland to Vicksburg to look after the Iowa sick and wounded, has returned, and gives a most sickening account of the horrible condition of affairs. He says that there are at least five thousand sick Federal soldiers in Grant's army, and that they are dying in droves. He says words will fail to paint the terrible suffering of the wounded and diseased. One case he mentions of a Missouri Federal soldier, both of whose legs were broken, he being at the same time afflicted with the dysentery. He lay in the camp in his filth for eleven days, without the least attention being paid him until one of the legs had gangrened. Dr. Russell spoke to the surgeon in charge about his case, who brutally replied that he had nothing to do with Missouri troops, and that if he (Dr. R.) wanted to take his legs off he might do it. Dr. Russell says that there are but few medicines, and that, in the utter absence of quinine, the physicians attempt a cure of dysentery, which is everywhere prevalent, with nut-gall, the only approach to a remedy they can procure.

We copy the above ridiculous paragraph from the *London Lancet.* It is singular that as that journal has access to the respectable publications of this country, medical and secular, it should go so far out of its way as to select a miserable butternut, backwoods country newspaper as authority for so grave a charge as is contained in the above unmitigated falsehood. So far from the sick and wounded soldiers under Grant being in any way neglected, or improperly cared for, we venture the assertion that *never in the history of civilized warfare, European or elsewhere,* was the medical and surgical wants of an enemy so well provided for as is the army of Maj.-Gen. Grant at this very time. Hospitals, surgeons, medical supplies,—everything is most ample; besides, the hospitals at Memphis are most complete in all essential details; and still further, the department has a number of hospital steamers fitted up in most excellent style, floating at will up and down the Mississippi, ready for service wherever wanted. Whatever we may say in the way of severe criticism of Gen. Hammond in some of his special orders, we are bound to say that the medical and hospital organization of the service is most thorough and complete; and if there be any part of the service more particularly well organized in all medical and surgical respects than another, it is this very department of the army of Gen. Grant investing Vicksburg. —The *Dubuque Herald* and its sage correspondent, Dr. Russell, will do for the latitude of London, but not so well here at home.

Surgeon-General Hammond's Circular No. 6.—The Circular No. 6 has, as far as we can learn, met with almost universal condemnation. The editorial of our last number, with the proceedings of the profession in this city, have been approved by many medical gentlemen. The proceedings of the American Medical Association, as also those of the Ohio State Medical Society, will furnish our readers the resolutions passed in regard to Circular No. 6. The profession has not manifested such a general interest and excitement in any question for a long time. The Surgeon-General must revoke his order, or he must resign. His influence for good is gone. He no longer has the respect either of the military surgeons or the civil profession. Facts accumulate daily to show that calomel and tartar emetic have not been abused to the extent as stated in the Circular. A surgeon who acted as Medical Director in a campaign in Missouri, at Island No. 10, before Corinth, assured us that he did not see any cases of mercurial gangrene, and but very few cases of ptyalism, the most of which were intentionally produced in the treatment of syphilis. Another surgeon, now a Medical Director of a large department, and who has served in the same capacity in the South, and in the army of the Potomac, gives us the same assurance. At the meeting of the Ohio State Society, several surgeons on sick leave stated that they had not seen the "innumerable" cases of ptyalism. The inconsistency of the Order is glaring. The Surgeon-General cuts out calomel from the supply table and leaves pill. massa hydrarg., corrosive sublimate, and the iodides. Again, we must iterate a fair inference from reading the Order, that the Surgeon-General issued it to gratify the charlatans and enthusiasts who have been about him. Why did he use the ordinary synonym, calomel, if he did not intend to gratify a popular prejudice fostered by various quacks? Why did he not use a chemical name proper in designating the remedy? His Order would have been as readily understood by the military surgeons. It looks as if he intended to give his profession a blow. It looks as if he intended to place the seal of his high office on the slanders of the correspondents of two-penny papers, and the lies of a set of men improperly called sanitary inspectors, which have been uttered time and again against the military surgeons. Whatever his intentions may have been, he has committed an uncalled for, and an unjust injury on his profession. He has placed his brethren in a position where every little traveling quack, and every so called respectable charlatan may point his finger at in triumph. If it could be established that the two remedies had been abused, there might be some justification of the Order. But we have yet to hear one surgeon state that he has seen the abuses.

We publish in this number an article from a correspondent on the subject. We find nothing worthy of notice in the article, and only give place to it that every one may be heard. Dr. Hibberd is greatly exercised at the undignified tone of our article, and the resolutions of the profession of this city on Circular No. 6. He regards the Surgeon-General in a different light from what we do. As Surgeon-General he is to be respected so long as he represents the present scientific opinions of the profession, and makes the office respectable. He ceased to represent the great catholic, liberal spirit of the profession when he issued Circular No. 6. He ceased to confer an honor on the place he occupies in issuing the Circular. The regular profession has always claimed the right to use all remedies. Dr. Hammond joins with the Eclectics, Homœopaths, *et id omne genus*, in denouncing certain remedies. He has insulted the entire profession by saying that there are none capable of using remedies judiciously. Therefore, we speak of the Surgeon-General in the same language we do of any other person who has committed a great outrage on the profession.

Dr. Hibberd's defense of the Surgeon-General is very weak. Is it not fair to say that if the Cincinnati profession has knowledge of twenty-five thousand cases with only nine cases of ptyalism, that the Circular of the Surgeon-General is false? He uses the word "innumerable." We certainly think that a good many more than nine should have been found in the twenty-five thousand. Dr. H. is very anxious to have us tried under Order 38, as having caused discord and discontent among soldiers in the field and citizens at home. We have nothing to say of our loyalty, as it is not a question at issue. The question is one of scientific interest, and of immediate interest to every soldier and every professional man. We but echo the sentiment of hundreds of medical men when we say that we shall devote much time in having the Surgeon-General removed. He nor any other man can occupy a position so high, or have reputation so great, that he can be shielded from the indignation of his profession. We know the feeling and determination in our State. It matters little to us what may be thought of our course by some weak-kneed individuals, who have no more back-bone than a worm. We say Dr. Hammond must either revoke his order or resign. As for the Cincinnati profession, we imagine that our correspondent will find out that it is able to take care of itself, and make good all of the positions taken in the proceedings of its meeting. Our correspondent is greatly shocked that the Cincinnati profession should have given their proceedings to the people through the newspapers. He has no word of condemnation for the Surgeon-General permitting his order to be published in the papers. The profession of this city desired that the people should know that Dr. Hammond is not sustained, that the facts of the Circular are not true, and therefore published the proceedings in the papers.

We know of no gentleman here who has had any personal quarrel, or any dislike to the Surgeon-General. He is judged by his official acts. His professional brethren are the only judges capable of passing an opinion. They are doing so, and our word for it, before the profession is through with this matter, the Surgeon-General will heartily repent his Circular. As for ourselves, we permit no man to abuse or insult the profession, without giving him a rebuke. He who does not respect his profession does not respect himself. Away with all the weak, miserable çant of dignified, respectful language in expressing opinions of quacks or those who in any way sympathize with them. We believe we have as high a regard for the true scientific man as any one, but we have no tenderness or fear in expressing our disgust for such a man when he turns and wilfully and unjustly casts reproach on his profession which has made him. Many gentlemen forget that every man who reaches distinction in any profession owes it to his professional brethren. The obligations resting on him to maintain the ethics and tone of the profession, and to represent the spirit of scientific progress of his profession, are very great. When he ceases to do so, or when he does anything to cast reproach on it or to lower the position of his brethren in public estimation, he has proved recreant to every duty, and is deserving of the pointed rebuke which he sooner or later receives.

Assistant-Surgeons, O. V. I.—A special session of the Board of Examiners for Surgeons and Assistant-Surgeons of Ohio Regiments was held at White Sulphur Springs, during the meeting of the State Medical Society, June 17, 18, at which the following were recommended to the Governor for appointments as Assistant-Surgeons: Dr. A. Potter, Willshire; Dr. A. Belding, Ravenna; Dr. A. E. Jenner, Crestline; Dr. John Trumbull, Xenia.

Dr. Talbott Bullard, of Indianapolis, died at his residence in that city on the morning of June 18th. He was an eminent physician, and enjoyed a large and choice practice. Thus rapidly are passing away in the prime of life, those we love to esteem, and upon whom the profession and the people alike delight to place their trust. We find the following paragraph in a daily paper, which at once explains his death and pays a fit tribute to his worth :

> "At the request of the Governor he accompanied the first party of Indiana Surgeons to Vicksburg as Medical Director. While *en route* for home he was taken quite ill, and died in a few hours after his arrival. Thus, ripe in years and in honors, another patriot, Christian and husband has sacrificed his life upon the altar of his country while seeking to alleviate the sufferings of others. He was universally respected, and his sudden death has cast a gloom over the entire community."

The Human Wheel, its Spokes and Felloes.—Dr. Oliver W. Holmes has contributed an article for a recent number of the *Atlantic Monthly* with the above characteristic title. His object is to hold up in honor the inventive genius of Americans ; thus he speaks at some length of that very *comfortable* invention, the Plumer boot, accompanied with anatomical illustrations of its principle, and some details of the several steps and data of Dr. J. C. Plumer's improvements. Passing along, he remarks—"The two accomplishments common to all mankind are walking and talking. Simple as they seem, they are yet acquired with vast labor, and very rarely understood in any clear way by those who practice them with perfect ease and unconscious skill." He gives some of the efforts that have been made at sundry times to construct a talking machine. Some of these are very elaborate, but at best have only been such as to articulate a few simple syllables.

Perhaps still more difficult has it been to make a figure that can walk. Very merry grows our facetious doctor in speaking of the present nursery wonder, the *Autoperipatetikos*. He gives the autopsy of one of her family, and demonstrates that this handsome, golden-booted, two-legged Miss —— is a *quadruped.*

The results of American ingenuity in the wonderful improvements made in artificial limbs seem naturally enough suggestive in such a connection, and we quote in full what he says of the wooden leg of Mr. Palmer :

> "A boy of ten years old, living in a New Hampshire village, had one of his legs crushed so as to require amputation. The little fellow was furnished with a 'peg,' and stumped round upon it for ten years.

We can imagine what he suffered as he grew into adolescence under the cross of this unsightly appendage. He was of comely aspect, tall, well-shaped, with well-marked, regular features. But just at the period when personal graces are most valued, when a good presence is a *blank* check on the Bank of Fortune, with Nature's signature at the bottom, he found himself made hideous by this fearful-looking counterfeit of a limb. It announced him at the threshold he reached with beating heart by a thump more energetic than the palpitation in his breast. It identified him as far as the eye of jealousy could see his moving figure. The 'peg' became intolerable, and he unstrapped it and threw himself on the tender mercies of the crutch.

"But the crutch is at best an instrument of torture. It presses upon a great bundle of nerves; it distorts the figure; it stamps a character of its own upon the whole organism; it is even accused of distempering the mind itself.

"This young man, whose name was 'B. Frank Palmer,' (the abbreviations probably implying the name of a distinguished Boston philosopher of the last century, whose visit to Philadelphia is still remembered in that city,) set himself at work to contrive a limb which should take the place of the one he had lost, fulfilling its functions and counterfeiting its aspect so far as possible. The result was the 'Palmer leg,' one of the most unquestionable triumphs of American ingenuity. Its victorious march has been unimpeded by any serious obstacle since it first stepped into public notice. The inventer was introduced by the late Dr. John C. Warren, in 1846, to the Massachusetts General Hospital, which institution he has for many years supplied with his artificial limbs. He received medals from the American Institute, the Massachusetts Charitable Association, and the Great Exhibition in New York, and obtained an honorary mention from the Royal Commissioners of the World's Exhibition in London,—being the only maker of legs so distinguished. These are only a few of fifty honorary awards he has received at various times. The famous surgeons of London, the *Societe de Chirurgie* of Paris, and the most celebrated practitioners of the United States have given him their hearty recommendations. So lately as last August, that shrewd and skilful surgeon, Dr. Henry J. Bigelow, who is as cautious in handling his epithets as he is bold in using the implements of his art, strongly advised Surgeon-General Hammond to adopt the Palmer leg, which, after a dozen years' experience, he had found none to equal. We see it announced that the Board of Surgeons appointed by the Surgeon-General to select the best arm and leg to be procured by the Government for its crippled soldiers chose that of Mr. Palmer, and that Dr. Hammond approved their selection.

"We have thought it proper to show that Mr. Palmer's invention did not stand in need of our commendation. Its merits, as we have seen, are conceded by the tribunals best fitted to judge, and we are therefore justified in selecting it as an illustration of American mechanical skill.

"The Committee on Science and the Arts of the Franklin Institute of Pennsylvania thus stated the peculiarities of Mr. Palmer's invention:

"*First.* An ingenious arrangement of springs and cords in the ***inside*** of the limb, by which, when the wearer is in the erect position, the limb is extended, and the foot flexed so as to present a natural appearance.

"*Second.* By a second arrangement of springs and cords in the inside of the limb, the foot and toes are gradually and easily extended, when the heel is placed in contact with the ground. In consequence of this arrangement, the limping gait, and the unpleasant noise made by the sudden stroke of the ball of the foot upon the ground in walking, which are so obvious in the ordinary leg, are avoided.

"*Third.* By a peculiar arrangement of the knee-joint, it is rendered little liable to wear, and all lateral or rotary motion is avoided. It is hardly necessary to remark that any such motion is undesirable in an artificial leg, as it renders its support unstable.

"Before reporting some of the facts which we have seen, or learned by personal inquiry, we must be allowed, for the sake of convenience, to exercise the privilege granted to all philosophical students, of enlarging the nomenclature applicable to the subject of which we are treating.

"Man, according to the Sphinx, is successively a *quadruped*, a *biped*, and a *triped*. But circumstances may change his natural conditions. If he loses a leg, he becomes a *uniped*. If he loses both his legs, he becomes a *nulliped*. If art replaces the loss of one limb with a factitious substitute, he becomes a *ligniped*, or, if we wish to be very precise, a *uniligniped*; two wooden legs entitle him to be called a *biligniped*. Our terminology being accepted, we are ready to proceed.

"To make ourselves more familiar with the working of the invention we are considering, we have visited Mr. Palmer's establishments in Philadelphia and Boston. The distinguished 'Surgeon-Artist' is a man of fine person, as we have said. But if he has any personal vanity, it does not betray itself with regard to that portion of his organism which Nature furnished him. There is some reason to think that Mr. Palmer is a little ashamed of the lower limb which he brought into the world with him. At least, if he follows the common rule and puts that which he considers his best foot foremost, he evidently awards the preference to that which was born of his brain over the one which he owes to his mother. He walks as well as many do who have their natural limbs, though not so well as some of his own patients. He puts his vegetable leg through many of the movements which would seem to demand the contractile animal fibre. He goes up and down stairs with very tolerable ease and despatch. Only when he comes to *stand* upon the human limb, we begin to find that it is not in all respects equal to the divine one. For a certain number of seconds he can poise himself upon it; but Mr. Palmer, if he indulges in verse, would hardly fill the Horatian complement of lines in that attitude. In his ante-room were unipeds in different stages of their second learning to walk as lignipeds. At first they move with a good deal of awkwardness, but gradually the wooden limb seems to become, as it were, penetrated by the nerves, and the intelligence to run downwards until it reaches the last joint of the member.

"Mr. Palmer, as we have incidentally mentioned, has a branch establishment in Boston, to which also we have paid a visit, in order to learn some of the details of the manufacture to which we had not attended in our pleasant interview with the inventor. The antechamber here, too, was the nursery of immature lignipeds, ready to exhibit their growing accomplishments to the inquiring stranger. It almost seems as if the artificial leg were the scholar, rather than the person who wears it. The man does well enough, but the leg is stupid until practice has taught it just what is expected from its various parts.

"The polite Boston partner, who, if he were in want of a customer, would almost persuade a man with two good legs to provide himself with a third, carried us to the back part of the building, where legs are organized.

"The *willow*, which furnishes the charcoal for the gunpowder that blows off limbs, is the wood chosen to supply the loss it has helped to occasion. It is light, strong, does not warp or 'check' so much as many other woods, and is, as the workmen say, *healthy*,—that is, not irritating to the parts with which it is in contact. Whether the *salicine* it may contain enters the pores and invigorates the system may be a question for those who remember the drugs in the Sultan's bat-handle and the remarkable cure they wrought. This wood is kept in a dry-house with as much care as that intended for the manufacture of pianos. It is thoroughly steamed, also, before using.

"The wood comes in rudely shaped blocks, as lasts are sent to the factory, seeming to have been coarsely hewed out of the log. The shaping, as we found to our surprise, is all done by hand. We had expected to see great lathes, worked by steam-power, taking in a rough stick and turning out a finished limb. But it is shaped very much as a sculptor finishes his marble, with an eye to artistic effect,—not so much in the view of the stranger, who does not look upon its naked loveliness, as in that of the wearer, who is seduced by its harmonious outlines into its purchase, and solaced with the consciousness that he carries so much beauty and symmetry about with him. The hollowing-out of the interior is done by wicked-looking blades and scoops at the end of long stems, suggesting the thought of dentists' instruments as they might have been in the days of the giants. The joints are most carefully made, more particularly at the knee, where a strong bolt of steel passes through the solid wood. Windows, oblong openings, are left in the sides of the limb, to insure a good supply of air to the extremity of the mutilated limb. Many persons are not aware that all parts of the surface *breathe* just as the lungs breathe, exhaling carbonic acid as well as water, and taking in more or less oxygen.

"One of the workmen, a pleasant looking young fellow, was himself, we are told, a ligniped. We begged him to give us a specimen of his walking. He arose and walked rather slowly across the room and back. 'Once more,' we said, not feeling quite sure which was Nature's leg and which Mr. Palmer's. So he walked up and down the room again, until we had satisfied ourselves which was the leg of willow and which that of flesh and bone. It is not, perhaps, to the credit of our eyes or observing powers, but it is a fact, that we deliberately selected *the wrong leg.* No victim of the thimble-rigger's trickery was ever more completely taken in than we were by the contrivance of the ingenious Surgeon-Artist.

"Our freely expressed admiration led to the telling of wonderful stories about the doings of persons with artificial legs. One individual was mentioned who *skated* particularly well; another who *danced* with zeal and perseverance; and a third who must needs *swim* in his leg, which brought on a dropsical affection of the limb,—to which kind of complaint the willow has, of course, a constitutional tendency,—and for which it had to come to the infirmary where the diseases that wood is heir to are treated.

"But the most wonderful monuments of the great restorer's skill are the patients who have lost both legs,—*nullipeds*, as presented to Mr. Palmer; *bilignipeds*, as they walk forth again before the admiring world, balanced upon their two new-born members. We have before us delineations of six of these hybrids between the animal and vegetable world. One of them was employed at a railway-station near this (Atlantic) city, where he was often seen by a member of our own household, whose testimony we are in the habit of considering superior in veracity to the naked truth as commonly delivered. He walked about, we are assured, a little slowly and stiffly, but in a way that hardly attracted attention.

"The inventor of the leg has not been contented to stop there. He has worked for years upon the construction of an artificial *arm*, and has at length succeeded in arranging a mechanism, which, if it cannot serve a pianist or violinist, is yet equal to holding the reins in driving, receiving fees for professional services, and similar easy labors. Where Mr. Palmer means to stop in supplying bodily losses it would be premature to say. We suppose the accidents happening occasionally from the use of the guillotine are beyond his skill, and spare our readers the lively remark suggested by the contrary hypothesis.

"It is one of the signs of our advancing American civilization, that the arts which preserve and restore the personal advantages necessary or favorable to cultivated social life should have reached such perfection among us. American dentists have achieved a reputation which has sent them into the palaces of Europe to open the mouths of sovereigns and princes as freely as the jockeys look into those of horses and colts. Bad teeth, too common among us, help to breed good dentists, no doubt; but besides this there is an absolute demand for a certain comeliness of person throughout all the decent classes of our society. It is the same standard of propriety in appearances which lays us open to the reproach of caring too much for dress. If the national ear for music is not so acute as that of some other peoples, the national eye for the harmonies of form and color is better than we often find in older communities. We have a right to claim that our sculptors and painters prove so much as this for us. American taste was offended, outraged, by the odious 'peg' which the Old-World soldier or beggar was proud to show. We owe the well-shaped, intelligent, docile limb, the half-reasoning willow of Mr. Palmer, to the same sense of beauty and fitness which moulded the soft outlines of the Indian Girl and the White Captive in the studio of his namesake at Albany.

"As we wean ourselves from the Old World, and become more and more nationalized in our great struggle for existence as a free people, we shall carry this aptness for the production of beautiful forms more and more into common life, which demands first what is necessary and then what is pleasing. It is but a step from the painter's canvas to the weaver's loom, and the pictures which are leaving the easel to-day will show themselves in the patterns that sweep the untidy sidewalks to-morrow. . . . . .

"We have run away from our subject farther than we intended at starting; but an essay on legs could hardly avoid the rambling tendency which naturally belongs to these organs."

Deaths of Ohio Surgeons.—We are again called on to record the deaths of two more surgeons of Ohio regiments.

Dr. Gilsky, surgeon of the —th Ohio regiment, died very suddenly during last month at Winchester, Va., while on duty with his regiment.

Dr. Estep, surgeon of the 126th Ohio, was killed on the retreat with his regiment from Martinsburg, June 20th.

On the person of our lamented friend Hartmann was found the following touching letter to his wife:

"MAY 3, 1863.

"DEAREST ANNA—During the wild flight of our troops yesterday afternoon, I was shot through the abdomen. I am in the hands of the Southerners. Only a little part of my intestines is injured, and all may be well. But I want to write you while I am able, to send you a last farewell, if I should die. You will receive this letter only in case of my death. I fear not death, but to leave you and the children so soon.

"My portfolio, containing over one hundred dollars, watch, jack-knife and canteen, I have been robbed of by Alabama soldiers. Write to Dr. Knaus to sell my horse, saddle, blankets (if saved,) and send you the proceeds. To obtain the arrears of my pay and pension, employ Jacob Miller.

"Educate our children to be good and useful. With my last kiss, farewell forever, thou, my best beloved, poor, hard-tried wife. The last farewell from your AUGUST."

Artificial Arms.—By order of the Surgeon-General, a Board composed of Medical-Inspector Clymer, U. S. A., and Surgeons Murray and Goddard, will be convened in this city, on the 22d June, to examine and report upon such models of artificial arms as may be brought before them. The Board has been instructed to report fully as to the merits, positive and relative, of the models presented for their inspection, and their price. Inventors throughout the country are requested to forward models of their inventions for the inspection of the Board.—*Medical and Surgical Reporter.*

Lawson on Phthisis Pulmonalis.—We have just received the last number of the *British and Foreign Medico-Chirurgical Review*, in which we find a lengthy and very favorable review of Dr. Lawson's work on Phthisis. We feel gratified that our neighbor has received so appreciative a notice so far from home. We are not aware what efforts have been made by the publishers to push the sale of this book, but we believe that our readers who buy and read it will thank us for our commendation. Of course, we can not make any lengthy quotations from this review, but we give the concluding paragraph as manifesting the kindly spirit of the whole:

"In parting from our author, though we can not enter into all his hopeful views of the cure of phthisis, yet we can most willingly express the satisfaction we have had in the study of his work: our analysis of it, imperfect as it is, would not otherwise have been so lengthened. No subject in medical science has been more productive of monographs of high ability than this disease—of monographs which have become classical. We have some confidence that this work will rank amongst them. For acuteness of observation, for sober discrimination and sound judgment, and fair criticism of the writings of others, and especially of contemporaries, and for the wide knowledge which it displays of the literature of his subject, we know few books superior to it. We bestow our praise the more readily, our author being an American; yet though an American of Anglo-Saxon race, as his name implies, and one who we trust will, with all his right-minded countrymen, still cherish a love of the stock from which he has sprung, abhorrent of the vulgar clamor sadly now prevailing against England, as if the American States, whether united or separated, Federal or Confederate, had not with our country a common interest, apart from the community of blood, that of language, of literature, and of laws."

The American Medical Association.—We publish the proceedings of the American Medical Association at its recent Chicago meeting. We are indebted to Dr. Davis for advance proof-sheets of the proceedings, though we were not able to make use of them in full.

Our Bills will be made out and forwarded in the next issue of the *Lancet and Observer*, at which time in all cases the account will be made out for $3.00. We hope our friends will put it in our power to send receipts instead of accounts, for all unpaid subscriptions.

Mrs. Partington says the doctors have entirely misunderstood the Surgeon-General's Order No. 6. He didn't mean to prohibit the use of calomel and tartar emetic, but only to come out against *calumny* and *anti-money*.

Burning of a Medical College.—The Medical College at Lexington, Ky., was entirely destroyed by fire on the 22d ult. It has been used of late for a Government Hospital. The loss is placed at $90,000, which will probably be bad for the Government, and good for the corporators of the College.

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Army Medical Intelligence.

Surgeon Lewis Dyer, 81st Illinois Volunteers, dismissed by Special Orders No. 158, current series, from the Adjutant-General's Office, has been under special circumstances, and upon the recommendation of Major-General McPherson, commanding 17th Army Corps, restored to the service, provided the vacancy has not been filled.

By direction of the President, Assistant-Surgeon Washington Bury, 122d Pennsylvania Volunteers, has been dishonorably mustered out of service, to date when his regiment is mustered out, for neglecting the sick at the battle of Chancellorsville.

The muster into service of T. B. Drake, as Assistant-Surgeon, 1st Arkansas Infantry, has been revoked, and he is discharged the service from the date of muster in for incompetency, the appointment having been made without competent authority.

Surgeon E. E. Atkinson, 2d Regiment, Eastern Shore, Maryland, Volunteers, has been honorably discharged the service of the United States on account of physical disability.

So much of Special Orders 39, current series, from the Adjutant-General's Office, as honorably discharged from the service, on account of ill-health, Surgeon George Kemble, U.S.V., has been revoked, and he has been restored to his position in the army.

So much of Special Orders 197, current series, from the Adjutant-General's Office, as dismissed Surgeon James D. Hewitt, 107th New York Volunteers, Surgeon S. M. Hand, 137th Pennsylvania Volunteers, Assistant-Surgeon J. B. Ashcorn, 126th Ohio Volunteers—the two former "for absence without proper authority," and the latter for "accepting bribes for procuring discharge of soldiers"—is amended to read: Surgeon James D. Hewitt, 119th New York Volunteers, Assistant-Surgeon S. M. Hand, 137th New York Volunteers, Assistant-Surgeon J. P. Ashcorn, 116th Pennsylvania Volunteers.

Assistant-Surgeon A. J. Maloney, Mississippi Marine Brigade, having tendered his resignation, is hereby honorably discharged the service, on account of physical disability resulting from disease of the lungs.

Surgeon Josiah Simpson, U.S.A., and Surgeon C. C. Cox, U.S.V., have been designated by the Surgeon-General to represent the Medical Department, U.S.A., at the meeting of the American Medical Association, to be held at Chicago, Ill., June 2, 1863.

Surgeon C. B. Frost, 15th Vermont Volunteers, having tendered his resignation, has been honorably discharged the service of the United States, to date May 3, 1863.

So much of Special Orders 204, current series, from the Adjutant-General's Office, as discharged Surgeon N. P. Monroe, 20th Maine Volunteers, from the service, for declining to submit to an examination by a Medical Board, has been revoked, and he, having tendered his resignation, is hereby honorably discharged the service of the United States, to date May 18, 1863.

Assistant-Surgeon F. T. Dade, U.S.V., is on leave of absence for twenty days in New York city.

Surgeon B. A. Vanderkeift, U.S V., has been placed in charge of St. John's College Hospital, Annapolis, Md.

Surgeon T. P. Gibbons, U.S.V., has been granted leave of absence for thirty days for the benefit of his health.

Assistant-Surgeon Franklin Grube, U.S.V., has been assigned to duty with the First Brigade of the Volunteer Division, Artillery Reserve, Army of the Potomac.

Surgeon Abram L. Cox, U.S.V., is at Orange, N. J., on twenty days' leave for the benefit of his health.

Surgeon D. W. Bliss, U.S.V., has been reinstated in charge of the Armory Square Hospital, by order of the Secretary of War.

Surgeon W. H. Gobrecht, U.S.V., has been assigned to the charge of the Seminary Hospital at Covington, Ky., and to duty as member of the Board for the examination for discharge in the hospitals at Cincinnati and Covington, Ky.

The following assignments to duty of Medical Officers have been made :

Surgeon F. A. Keffer, U.S.V., now on duty at the General Hospital, West Philadelphia, Pa., and Assistant-Surgeon H. A. Schlaefflin, U.S.V., to report to Major-General Banks, commanding Department of the Gulf.

Surgeon W. A. Conover, U.S.V., now on duty at Alexandria, Va., to report to the Medical Director at Fort Monroe, Va.

Surgeon D. J. McKibbin, U.S.V., now on duty at Hilton Head, S. C., and Assistant-Surgeons William Carroll, W. O McDonald, and C. J. Kipp, U.S.V., to report in person to Major-General Rosecrans, commanding Department of the Cumberland, and by letter to Assistant Surgeon-General Wood, at St. Louis, Mo.

Assistant-Surgeon J. M. Pittinos, U.S.V., to report in person to Surgeon Thomas A. McParlin, U.S.A., in charge of General Hospital at Annapolis, Md., and by letter to Surgeon Simpson, Medical Director, at Baltimore, Md.

Assistant-Surgeon W. A. Banks, U.S.V., to report in person to Major-General Grant, commanding Department of the Tennessee, and by letter to Assistant Surgeon-General Wood, at St. Louis.

Assistant-Surgeon J. B. Bellangee, U.S.V., to report to Major-General Foster, commanding Department of North Carolina.

Medical Inspector Augustus C. Hamlin, U.S.V., now on duty in Washington, D. C., to relieve Medical Inspector G. W. Stipp, U.S.A., in the Department of the South, the latter on being relieved to report in person to the Secretary of War.

Surgeon D. W. Wainwright, U.S.V., now on duty in the Middle Department, and Assistant-Surgeon C. B. White, U.S.A., now on duty at Pittsburg, Pa., to report in person to Gen. Grant, for duty in the Department of the Tennessee, and by letter to Assistant Surgeon-General Wood, at St. Louis, Mo.

Surgeon J. J. Milhau, U.S.A., now on duty in Philadelphia as a member of the Army Medical Board, which will shortly adjourn, to report for duty to the Medical Director, Army of the Potomac.

Assistant-Surgeon G. W. Hogeboom, U.S.V. to report for duty to the General commanding the Department of the Cumberland, and by letter to the Assistant Surgeon-General at St. Louis, Mo.

Surgeon G. W. Martin, 14th Maine Volunteers, has been mustered out of service, from July 17th, 1862, the date he joined for duty, he having been irregularly commissioned.

A Board, to consist of Surgeon Chas. McDougall, Surgeon E. L. Abadie, and Assistant-Surgeon H. L. Sheldon, U.S.A., has been ordered to assemble at West Point, New York, on the 6th June, to examine into the physical qualifications of the members of the graduating class. On the completion of this duty a report of the proceedings of the Board will be made to the War Department, and a special report in the case of any individual thought to be wanting in the ability requisite for the military service. The same Board will continue in session, until it has examined into the physical condition of all newly appointed cadets who who may present themselves, and will report their proceedings to the War Department. The junior member will act as recorder of the Board.

The Board for the examination of candidates for the appointment of Assistant-Surgeons of Volunteers, consisting of Surgeons A. P. Mylert, R. L. Stanford, and M. Goldsmith, recently in session at Louisville, Ky., has been dissolved, and a new Board convened at Cincinnati, Ohio, for the same purpose, by order of the Surgeon-General. Surgeons J. T. Carpenter, W. A. Gobrecht, and Assistant-Surgeon E. Freeman, U.S.V., are members of the Board.

Surgeon Norman Gay, U.S.V., has been assigned to duty as Medical Director, Left Wing, 16th Army Corps, Headquarters, Jackson, Tenn.

Surgeon S. S. Mulford, U.S.V., has relieved Surgeon Thos. M. Getty, U.S.A., as Medical Director, 4th Army Corps, at Yorktown, Va.

Surgeon H. J. Churchman, U.S.V., is sick at the Officers' Hospital, Memphis, Tenn.

Assistant-Surgeon E. Freeman, U.S.V., has been relieved from duty on the Board of Examiners now in session at Cincinnati, Ohio, and Assistant-Surgeon Wm. Grinsted, U.S.V., has been detailed in his place.

Surgeon C. W. Hornor, U.S.V., has been assigned to duty in charge of General Hospital, No. 23, Nashville.

There are one hundred vacancies in the Corps of Surgeons and Assistant-Surgeons of Volunteers.

Surgeon W. Clendenin, U.S.V., is sick, and under medical treatment at Nashville, Tenn. He has also tendered his resignation on account of feeble health.

Surgeon D. W. Hood, U.S.V., Medical Director, General Peck's Command, at Suffolk, Va., was captured by a scouting party from the 2d Mississippi, (rebel) regiment, while returning from an expedition on the Blackwater, May 16, 1863. Was taken to Richmond, and confined in the Libby Prison until May 23d, when he was released unconditionally. He has returned to Suffolk, and resumed his duties.

Surgeon C. F. H. Campbell, U.S.V., has resumed his duties as Medical Director, 1st Division, 8th Army Corps, after a short leave of absence.

Surgeon Henry Palmer, U.S.V., is on detached service, conducting convalescents from Baltimore, Md., and York, Pa., to the General Hospitals at Pittsburg, Cincinnati and Indianapolis.

Surgeon Zenas E. Bliss, U.S.V., is performing the duty of Medical Purveyor at Baltimore, Md., during the absence of Surgeon C. C. Cox, at Chicago, as delegate to the American Medical Association.

The General Hospitals, Calvert Street and Continental Hotel, Baltimore, Md., have been closed.

Assistant-Surgeon Wm. Threlkeld, U.S.V., has been assigned to duty in General Hospital No. 15, Nashville, Tenn.

Assistant-Surgeon W. S. Frink, U.S.V., has been transferred from General Hospital No. 18 to General Hospital No. 20, Nashville, Tenn.

Surgeon W. H. Thorn, U.S.V., is temporarily on duty as Medical Director, 11th Army Corps.

Assistant-Surgeon Frank Meacham, U.S.V., has been assigned to duty in General Hospital No. 9, Louisville.

Assistant-Surgeon C. E. Swasey, U.S.V., has been placed on duty at Washington, D. C., attending sick and wounded officers of volunteers.

A new General Hospital, called the Shumard Hospital, has been opened at Hickman, Ky.

Surgeon R. M. S. Jackson, U.S.V., has been assigned to duty as Medical Director, 23d Army Corps, Lexington, Ky.

By direction of the President, Surgeon C. D. Moore has been dismissed the service of the United States with loss of all pay and allowances, for giving certificates of disability for discharge in cases of enlisted men on insufficient grounds.

Surgeon Henry Janes has been assigned to duty in charge of General Hospital, 6th Army Corps, at Potomac Creek, Virginia.

The appointment of Assistant-Surgeon A. C. Schwarzwelder, U.S.A., has been revoked by direction of the President.

Assistant-Surgeon E. Y. Chase, C. C. Dumreecher, D. B. Sturgeon, H. A. Schlaefflin, and J. W. Pittinos, U.S.V., have been appointed Surgeons.

Drs. Robert Reyburn, of Pennsylvania, S. E. Fuller, of Connecticut, George F. French, of New Hampshire, Wm. C. Bennett, of Connecticut, and P. A. O'Connell, of Massachusetts, have been appointed Assistant-Surgeons of Volunteers.

Editorial Abstracts and Selections.

1. *The Effects of Small Doses of Opium.*—I have long known that, sometimes even in small doses, opium acts as a poison, and that on very rare occasions it produces an eruption on the skin ; but I was not prepared for the extraordinary train of symptoms which followed the administration of not more than sixty minims of paregoric, at an interval of six hours, in half-drachm doses. The history of the case is simple enough, and ought, I think, to be generally known.

About the end of last year I was asked to see a young lady—the daughter of a medical gentleman—who was suffering from a rather severe attack of bronchitis. After a time, all the acute symptoms subsided, but she complained of a teasing cough, which did not permit her to sleep during the night. In addition to ordering the steam of hot water to be inhaled—which, to my mind, is of all expectorants by far the most effectual—I added to an eight-ounce mixture she had formerly been taking half an ounce of paregoric. At 8 P. M. she took an ounce of the mixture, and again at 2 o'clock in the morning. The family becoming uneasy, I was sent for at an early hour, and, on examination, found the neck, face, arms, hands, and lower extremities (but not the trunk) covered with an eruption, in every respect so like that of scarlet fever, that I at once gave it as my opinion that she had somehow caught that disease—which, by the way, was prevailing at the time in the neighborhood. She at once set me right, by declaring that she had done nothing of the kind, but that I had poisoned her by giving her some preparation of opium. It then flashed across my mind that months before she had communicated to me this fact, though I had forgotten all about it. As this was not the first time she had been poisoned with opium, or some of its preparations, I think I can not do better than describe the effect it produces on her exactly in her own words:

"In from four to five hours after taking a dose of opium, I become suddenly almost deprived of sight and hearing, and am then seized with shivering. These symptoms go off as soon as I get warm in bed, and a rash then makes its appearance on my face, arms, hands, neck, and lower extremities, causing a burning, pricking sensation. The effect is the same on my skin when opium is applied externally; and such medicines as hyoscyamus and hops act as a poison, though in a minor degree. On one occasion, two drops of laudanum produced a slight attack of this kind." This is all very strange, and not easily accounted for, but I can vouch for the faithfulness of the picture. I may just say that vomiting was troublesome for a few hours, but readily yielded to small doses of brandy-and-water.

Desquamation of the cuticle began, just as it does in scarlet fever, about the end of the fifth day, and, as in that disease, the cuticle separated from the limbs in the form of scurf, and in large flakes from the hands and feet. Nay, more, the dropsy, which is the common sequela of scarlet fever, had to be guarded against, inasmuch as on one occasion she was threatened with anasarca. For reasons well known to you I can not sign my name to this communication, but I have much pleasure in enclosing my card.—*Cor. London Lancet.*

2. *Hysteria Terminating in Apoplexy.*—On Tuesday, January 6th, Sarah K——, a fine well-grown young woman, nearly sixteen years, walked a distance of two miles to my house, and requested my advice in consequence of feeling weak and inadequate to her duties as parlormaid in a respectable family, with whom she had resided two years. The sounds of the heart and chest were perfectly normal; her condition plump, and presenting no deviation from health, save a slightly anæmic state, to which alone I could attribute the debility complained of. I prescribed for her ammonio-tartrate of iron, in five-grain doses, to be taken thrice daily, and heard no more of the case until called up on Saturday morning, at 3 A. M., to see her.

I found she had been attacked some hours previously with a sensation of a ball rising in her throat, and a paroxysm of laughing, sobbing, and crying—in fact, with an attack of hysteria. The pulse was 80, small and weak; the face alternately flushed and pale; the lips red; the breathing natural; the pupils obedient to the stimulus of light. On sprinkling her face with water, she brushed off the moisture with her hand, and put back her hair; and on tickling the soles of the feet, retracted the limbs, evincing altogether partial consciousness, although unable to speak. I can not say that I apprehended any danger. As the feet were cold, I directed a foot-warmer to be applied; gave carbonate of ammonia, with tincture of sumbul and camphor mixture, every four hours, and a dose of warm aperient medicine at once.

Being prevented by a busy day from seeing her as I intended to have done in the afternoon, I was requested at 8 A. M. to see her immediately; but before I arrived she had expired. I found at 3 P. M. she had been attacked with clonic spasms, succeeded by the paralysis of the right arm, by stertorous breathing, and a state of profound coma, and that death had ensued about twenty minutes past eight.—*G. H. Doswell, in London Lancet.*

3. *Gonorrhœa.*—John Hastings, M.D., U. S. Marine Hospital. San Francisco, reports in the *Pacific Journal* his treatment of gonorrhœa. Patients in the acute stage are freely purged, kept quiet and placed on half-diet for three days, after which they are allowed full diet. The urethra, from the time of reception, is injected night and morning with a saturated infusion of fresh hydrastis canadensis. He is first directed to urinate, and after the injection to lie on his back for an hour, so as to retain it. After the first purgative no medicine is given internally. This treatment allays the chordee and ardor urinæ almost immediately, and in the course of a few days the disease is removed. Dr. H. says that, having used all kinds of treatment, he finds this produces a quicker cure, with less pain to the patient, than any other.

Dr. H. has also employed the infusion of hydrastis as an injection into the bladder in cystitis. For this purpose the temperature should be brought to blood-heat, and about four ounces thrown in daily. The pain on micturition is remarkably relieved. At at all events it has this marked advantage, that it replaces with an innocuous agent the harsh and severe applications too frequently resorted to in such cases.—*Chicago Med. Journal.*

4. *Pitting Prevented.*—A Scotch physician, Dr. Smart, has announced an invention which, he asserts, has never failed in his practice to prevent the disfigurement consequent in small-pox known as "pitting." The application consists of a solution of india rubber in chloroform, which is painted over the face (and neck in women,) when the eruption has become fully developed. When the chloroform has evaporated, which it readily does, there is left a thin, elastic film of india rubber over the face. This the patient feels to be rather comfortable than otherwise, inasmuch as the disagreeable itchiness, so generally complained of, is almost entirely removed, and, what is more important, "pitting," once so common, and even now far from rare, is thoroughly prevented wherever the solution has been applied.

5. *A Curious Oversight.*—A curious, and, I should trust, rare incident occurred in my practice a short time since, which perhaps you may deem worthy of record in your columns.

About eight o'clock in the evening I was sent for to a woman in labor, and upon my arrival, finding that the child had been born a quarter of an hour or so, I asked to see, and was shown, the after-birth, which was in a utensil under the bed, and seeing that there was plenty of membrane, clot, etc., with it, I did not examine it very closely. After staying some little time, I took my leave, feeling very satisfied with the condition of my patient and the child.

Next day the nurse came to my house in a state of great consternation to inform me that when they took the after-birth out to destroy it, lying at the bottom of the utensil they discovered a second well-developed child, which the nurse had, as I have no reason to doubt, most innocently swept into the chamber-vessel, together with the placenta, etc.; she being at the time in a state of excitement, never before having "taken" a child by herself.—Cor. London Lancet.

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ARTICLE I.

Address of Surgeon C. McDermont,

MEDICAL DIRECTOR, DEPARTMENT OF THE CUMBERLAND.

[At a meeting of the medical officers of the Eighth Brigade, (Department of the Cumberland,) and of the hospitals at the post of Gallatin, for the purpose of organizing an Army Medical Society, Surgeon McDermont, U.S.V., Medical Director of the post, was called to the chair, and before taking his seat, made the following remarks, which, at the request of the Society, he has written out for publication in the *Lancet*. WM. A. BROWN, Chairman of Committee.]

GENTLEMEN:—Being a stranger to most of you, I do not feel at liberty to regard the vote you have just cast in my favor as a personal compliment, but rather as a tribute of respect to my official position. However, I thank you cordially for the honor conferred, and shall endeavor so to discharge the duties of the chair as to render myself not unworthy of the favor now accorded to me on the score of seniority. I am extremely gratified to see so many surgeons convened to-day with the view of organizing an army medical society. This movement betokens a lively interest in your duties, and is eminently praiseworthy and prudent.

This society will be a source of mutual pleasure and encouragement. We will become better acquainted. New friendships will be formed, affording increased enjoyment while we are together, and a store of pleasant recollections when the chances of war shall again separate us. In a professional sense this organization can not fail to be of the highest advantage. Union is the grand element of power and success, and none can doubt that this union will give efficacy to our labors, and kindle a deeper interest in the welfare of our patients and the advancement of medical science. The observations of each surgeon, carefully registered at the bedside, will here be reported and compared; the experience of each will then become the property of all, and the record of this experience, with the results of particular modes of treatment, will in time constitute a valuable addition to the common stock of medical literature.

I have said that your conduct in organizing this society is *prudent.* Perhaps I am not fully understood in this remark. You are aware that heretofore, when a surgeon was once in possession of his commission, he was in no danger of forfeiting it, except for some act of gross immorality. His colonel and regiment might dislike him ever so much, the Governor who commissioned him might discover the appointment to be a bad one, but none of them had the power to strip him of his rank. Of late, however, there has been a change. The discharge of a surgeon from the service is now no uncommon occurrence. The standard of qualification has been raised. Examining Boards have been instituted, persons of doubtful capacity are cited for re-examination, and all who are found incompetent are summarily dismissed. At the present time, it does not suffice that a medical officer be able to take off a man's leg. He must know whether an operation is absolutely necessary. In the past all was well with the surgeon if he could assign a plausible excuse for the amputation of a limb; now the limb itself is deemed of more value than the most scientific reason that can be urged in favor of its removal. A good stump may be a mark of good soldiery, but it is no evidence of good surgery. The testimony of Stone River, Perryville, Shiloh, and every other battle-field of this war is on the side of conservative surgery—in favor of the *splint* against the *knife.* An eccentric Scotchman once remarked that he would rather be cured of his sickness by Sam Barr (an obscure country practitioner) than have the great Dr. Abernethy demonstrate the mortality of his disease by a *post-mortem* examination. The excellent Medical Director of this Department is among those who prefer cures to dissections. He is rigidly conservative, and is determined to put a stop to all needless operations, not by forbidding the use of surgical instruments, but by dismissing from the army those men who would use them injudiciously. I am informed that several of this character have recently been sent home. Yesterday's *Louisville Journal* reports two more surgeons dismissed for incompetency.

But it is not enough that the medical officer be a good physician and surgeon,—he must also be a good cook. He must not only know the relative proportions of nitrogenous and carbonaceous food requisite to maintain the health of the body, but he must also be able to direct how this food is to be prepared. If he permits damaged rations to be issued to the soldiers ; if he allows them to be served with sour or sodden bread, to eat parboiled beans, fried meats and other indigestible articles ; if he is unfamiliar with the processes of soaking, boiling, stewing, roasting, broiling, etc. ; if he is unlearned in the various methods in which the ration and hospital stores may be combined and cooked so as to afford a nutritious and palatable diet, he has no security against a disgraceful dismissal from the service. Moreover, he must have the eye and the tact of an accomplished housekeeper, to preserve his hospital in a state of perfect order and cleanliness,—a cleanliness not occasional or superficial, but constant and all-pervading, embracing the bodies, clothing and habits of the men, their quarters and bedding, their kitchen and cooking arrangements, the floors, halls, and hospital premises, the bed-pans, spit-boxes, sinks and sewers. The surgeon must also have a nose trained to detect the mildest stenches. Occasionally, scraps of food or filth will elude the eye and remain in some nook or corner to decompose and emit a noxious gas. Sometimes the nurses will neglect the prescribed directions for ventilation, allowing the air to become surcharged with carbonic acid, and other particles of morbid matter which are continually exhaling from the bodies of the sick. The well educated nose will at once detect impurities of this nature. The surgeon's ear must ever be attentive to the voice of suffering. He must have a heart full of sympathy, and a head and hand able and willing to administer the appropriate relief.

But even this is not all. *Bad orthography* will bring a surgeon to the guillotine. I speak advisedly on this point, for it is the rock on which my bark was once well nigh shipwrecked. While Medical Director of Gen. McCook's Corps, I issued an order against bad spelling and other defects which characterized the reports of certain surgeons. The order passed through the Division and Brigade Directors, and when it reached the Regimental Surgeons, it was found to contain a number of mis-spelt words. The surgeons brought charges against me, and it is difficult to say what would have been the result if I had not succeeded in saddling the mistakes upon the copying clerks.

To show how exacting some of the Examining Boards are, I may allude to the fate of the Surgeon of the Nineteenth Ohio, who was dismissed some weeks ago. His incompetency, I learn, consisted in his failure to tell the distance between the planets *Mars* and *Saturn!*

It is reported that the dismissal of this officer has been revoked by the Secretary of War, who, I presume, failed to comprehend how a knowledge of the distance between two planets could be made available in the treatment of camp dysentery and gunshot wounds.

It will be seen from the foregoing examples, that medical officers, like the Aposle Paul, "stand in jeopardy every hour;" and it behooves us to gird up the loins of our minds, rub the rust spots from our memories, and be vigilant, active, and fruitful in good works.

You have all seen the Surgeon-General's Circular, striking calomel and antimony from the supply-table. The object which the Surgeon-General professes to have in view meets my unqualified approbation, but the means adopted by him to accomplish this object will, in my opinion, utterly fail of any good result. To prevent salivation, he should have excluded with calomel all other mercurial preparations; for it is absurd to suppose that a doctor who is incapable of administering calomel can safely be trusted with the use of *blue mass* or *corrosive sublimate*. The doctor who salivates his patients through ignorance or malice, is not placed *hors du combat* by being deprived of calomel. So long as he can take *blue mass* in one hand and *hydrarg. cum creta* in the other, with the *bichloride of mercury* to fall back upon as a reserve, so long will our Sanitary friends and Inspectors be horrified with the sight of tender gums and copious saliva. You might as reasonably expect to cure a toper by withholding *brandy*, and restricting his potations to gin, whisky and plantation bitters, as to reform the practice of an ignorant doctor on the Surgeon-General's plan. In my judgment, the true policy would be, not to take from the medical corps remedies of acknowledged value, but to strike from the lists those surgeons whose ignorance and malpractice have disgraced the profession.

During the two years of my connection with the army, I have seen but one case of salivation. I was, therefore, much surprised when Circular No. 6 made its appearance. I knew that the abuses on which it is based did not occur in the Department of the Cumberland, and I could not resist the impression that the enemies of the regular profession, in the garb of Sanitary Inspectors, etc., had made false presentments to the Surgeon-General, inducing him to issue that order, which is destined to notoriety, inasmuch as it proclaims the whole body of army surgeons incompetent, and gives special aid and comfort to the enemies of legitimate medicine all over the land. It can not be denied that many surgeons have relied too much on medication and not enough on hygiene. This fault is common to surgeons just entering the service, most of whom know little of the vast importance of hygienic measures in the prevention and treatment of disease. The evil consequences of this defect were very visible in the army after the levy of last fall. To remedy this evil and insure a thorough hygienic system, I addressed a paper to Surgeon Murray, then at the head of medical affairs in this Department, recommending a suspension of all medicines for three months, during which period the surgeons should be required to concentrate all their skill and energies on purely hygienic measures. This plan was not enforced; but I am happy to say that without it the objects it was designed to secure have been consummated. There are few surgeons among us now who do not appreciate the importance of rigid police, cooking by companies, wholesome food, scrupulous cleanliness, pure water, free ventilation, equable temperature, cheering influences, etc. Indeed, I may say that these duties are now set down as cardinal points in the practice of every medical officer.

It affords me much satisfaction to know that the gentlemen among whom my lot has been cast are alive to their duties in the foregoing particulars, as the admirable condition of your camps and hospitals testifies. The character of your meeting to-day is another evidence that the medical staff of this command are determined to do their whole duty to the Government in her present struggle for the maintenance of our national honor.

ART. II.

Purpura Febriles.

BY E. L. CRANE, M.D., TIPPECANOE, OHIO.

Lately I have had several cases of purpura,—purpura febriles, I suppose, having symptoms I have never seen definitely described. With little or no premonition, the patient is taken with vomiting, tongue furred, and general febrile symptoms. On the third or fourth day spasms of more or less severity supervene. About this time, or sooner in some cases, petechia show themselves on different parts of the body, mostly on the hands, arms and legs; in some cases appear, then nearly disappear, or spread with a pale yellow color (ecchymoses.) Early in the complaint generally, but sometimes not before the third or fourth day, the muscles of the neck become contracted and the head drawn back. The muscles of the extremities also contract, and the patient makes great complaint on being moved. These contractions will sometimes appear and disappear for weeks. The pupils of the eyes are very much dilated at times, and this symptom is as unsteady as the contractions and relaxations of the muscles spoken of. One or the other of the eyes frequently turned from the axis of vision. The patient (always children two or three years of age, so far as I know,) frequently becomes much frightened, screams, appears wild as if it knew no one; sometimes appearing to be assured by the caresses of friends,—at other times its fright is aggravated by the least touch. Bowels generally very costive. The most of the matter vomited or purged is a tough mucus, sometimes appearing pus-like. The mouth becomes sore in spots,— spots coating heavily; coat then coming off, leaving a fiery red, sore surface; sores slightly phagedenic. Patient complains of some soreness over the region of the stomach.

I have had, or rather seen, three cases, all having the symptoms described. The first was sick about two months, then died. The second has been under treatment for four months; is now recovering slowly — has been for the last two weeks. The third has been ailing for six weeks; the characteristic symptoms of the complaint have mostly disappeared; the child is emaciated to a skeleton, but we think recovering. The child that died retained its mental faculties to the close remarkably clear. In the fore part of all the cases the mentality of the patients was much disordered, but in the latter part "preternaturally perfect."

In the case that proved mortal the child apparently died of inanition.

I have heard of another case, said to have had the same symptoms, which has now been sick some five months; with this difference, that the head became in the latter part of the complaint much enlarged. The child is now recovering, but is idiotic; was thought to be as intelligent as children generally are before it was sick. It may not have been a similar case from the beginning.

ARTICLE III.

Persulphate of Iron in Camp Diarrhœa.

BY O. C. GIBBS, M.D., FREWSBURG, N. Y.
Late Surgeon of the Twenty-First Regiment, N.Y.S.V.

In the *Lancet and Observer* for October last, in the Commercial Hospital reports, there are several cases of diarrhœa reported, in which Dr. John Davis used the persulphate of iron, with very prompt and satisfactory results. That article did not meet my eye until quite recently.

When in the army service, I found diarrhœa to be the almost universal disease in the army, especially while in active duty in the field. Bad water, change of water, impure coffee, changeable weather, exposures, undue fatigue,—each had the credit of producing it, and it certainly was very intractable, protracted and recurrent. I soon became convinced that to no one of these causes, nor to all combined, was the disease principally due. I have seen it as severe and as wide spread when the army was stationary, in good quarters, the weather fine and unchangeable, and the water used of the purest character, bubbling pure and cool from the finest springs in the world. I soon became convinced the disease had its origin in a lack of a suitable amount of vegetable food! When potatoes, onions, cabbages, etc., etc., were articles unknown in the army, for months in succession, the purest water, the healthiest climate, and the best sanitary regulations, would not serve to prevent camp diarrhœa, of a severe and intractable character. "Hard tack," salt pork, and poor beef, when long continued, do not furnish all the elements of a healthy nutrition, and debility and relaxation of all the tissues result.

Be the cause what it may, every army surgeon knows that diarrhœa is the bane of our army, and his especial annoyance. As an astringent and tonic, I soon commenced using the persulphate of iron, with opium; and though without known authority, I had every reason to be pleased with the result. At first the remedy was used in one-grain doses, but those were soon increased to two and three, and, in some cases, as high as five-grain doses. I never saw harm result from its use. When the disease was checked, one or two doses a day, for one, two, or three weeks, was always advisable, to prevent recurrence.

One word in regard to opiates. When I went to the army, I was told opiates were not well borne. Observation soon convinced me they were simply inoperative, from insufficiency of the doses. I at once gave the remedy in two and three-grain doses, and in some cases, even still more liberal doses. So beneficial did these doses prove, and so unaccompanied with unpleasant symptoms, that when a heavy day's march was before us, soldiers who were, or had recently been, afflicted with diarrhœa, would come to me before setting out, and ask to be supplied with two or three of these three-grain pills of opium. Such were very seldom compelled to give out because of their diarrhœa. So promptly efficient was the persulphate of iron, with full doses of opium, that scarce a day passed that some member of our regiment did not bring to me one or more long-suffering ones, from some other regiment, to whom he had confidently promised *his* surgeon would afford relief.

ARTICLE IV.

Remarks on the Feeding of Infants, and its Importance as a Means of Preventing the Tubercular Diathesis.

BY A. P. DUTCHER, M.D., ENON VALLEY, LAWRENCE CO., PA.

I.—The various Temperaments of the Body may be Altered.

Some children are born with a hereditary proclivity to pulmonary tuberculosis. That this predisposition may be counteracted and eradicated by proper management, we most firmly believe. And this is no new doctrine. As far back as the days of Galen it was distinctly taught that by particular management the various temperaments of the human body might be altered or changed. Indeed, some of the ancient teachers of medicine affirmed that individuals of the most elevated and sanguine temperament may be broken down into a nervous habit by confinement, anxiety, and affliction ; while, on the other hand, the most restless and audacious of the bilious temperament may be altered to the quiet of the phlegmatic by an uninterrupted succession of peaceful luxury and indulgence. These are important truths, and should not be lost sight of in our efforts to lessen the mortality from phthisis. The earlier such efforts are commenced the better. We can not be too particular in this case. If the child is at the breast, I would look after the mother's health very anxiously, particularly if she be a subject of pulmonary tuberculosis, or have marked and threatening symptoms of the malady. I would not allow her to suckle her babe. The physician who gives his consent to it is inflicting a great wrong both upon the mother and her child. The popular opinion that a woman suffering under phthisis should nurse her child so long as she has a particle of milk, can not be too severely denounced. Suckling under such an exhausting and mortal disease as pulmonary consumption, can never be attended with any good, and no infant should ever be suffered to draw its sustenance from such a corrupt source. We can not expect the stream to be pure when the fountain is impure. Nothing but a miracle can alter this fundamental law of nature. If, therefore, we would keep the child healthy, we must keep the mother healthy.

II.—How to Preserve the Mother's Health.

And how, it may be asked, is this to be accomplished ? Is it by confining her exclusively to the house, not permitting her to breathe the pure air of heaven, gorging her stomach with indigestible food, and stimulating drinks ? By no means. She should be encouraged to take plenty of out-door exercise, and eat such food as will preserve her in good health. No nursing woman should be kept upon any one kind of food exclusively. Her diet should be mixed, animal and vegetable. The proportion of animal should rather exceed the vegetable. Women of tubercular proclivities commonly have a repugnance to animal food, and I have seen some that would never touch it. Nurses of this description are always sure to have cross and unhealthy children. The milk being deficient in its animal constituents, is digested with difficulty, and does not contain all those elements which are requisite for the proper nutrition of the child; hence its physical development and growth are greatly retarded, and certain derangements are induced, such as colic, vomiting, diarrhœa, tabes mesenteria, tubercular meningitis, and other serious disorders, which very frequently terminate its existence before it is one year and a half old.

III.—The Mother's Milk the best Food for the Infant.

To a child under a year old its mother's milk should constitute its chief aliment. Indeed, for the first few months it requires nothing else; and if the mother be a good nurse, she should be able to support her infant independently of artificial nutriment, during at least two-thirds of infancy; that is, until the seventh or eighth month. About that time the teeth usually begin to appear, indicating that the digestive organs are capable of doing more work than they were at first, and accordingly we should then improve this indication of nature, and gradually commence to train and exercise those important powers. We may commence at first by adding to its usual diet, once or twice a day, a small portion of soft bread, steeped in hot water, with a little sugar and fresh cow's milk; subsequently some light broth, free from fat. Great care ought to be taken that it receive no more than it can easily digest. Every thing that disagrees with its stomach should be strictly prohibited.

IV.—Not Good to Feed Children too Often.

A very grave error is frequently made in the management of children by suckling or feeding them too often. It is true that, during the first five or six months, an infant requires to be nursed frequently through the night as well as the day, but this should be done at regular intervals, so that the stomach be not constantly gorged. Sufficient time should be allowed to digest its entire contents before more is taken. An interval of three or four hours will do at first, but as the child approaches the period of weaning, the time may be gradually extended to five or six hours, as the nature of such particular case may demand. And it is highly important that the hours for feeding should be arranged in such a manner as not to encroach upon the hours proper for sleep. After a child has attained the age of one year, and is weaned, it is a very bad practice to feed it in the night. Children thrive best where this habit is not followed. The stomach of the infant requires a regular and systematic period of repose. Where this is denied, the harmony of its functions will soon be destroyed, and indigestion with its numerous ills will follow in its wake. This practice is also injurious to the mother.

V.—How to Select a Good Nurse.

Sometimes from the loss of the mother, or a failure of her milk from disease, it becomes necessary to procure a strange nurse, and the opinion of the physician will often be asked as to the best mode of selecting one. In a matter of such vast importance to his little patient, he should always be guided by some fixed rules. We have generally been governed by the following; it is our beau-ideal of a good nurse. She should be about twenty-five years of age, of the nervo-sanguineous temperament, in height about five feet six inches, and a fair amount of embonpoint, with an average-sized brain, and a good intellectual and moral education. She should also bear the marks of a good state of health, such as a skin free from eruptions, tongue clean, gums full and not streaked with the tubercular margin; her teeth should be sound and perfect; her functions of digestion should be active and vigorous; her breasts should be firm and well formed, and with perfect, well developed nipples, from which the milk should flow freely, upon the slightest pressure; her milk should be thin, of a bluish-white color, sweet to the taste and rich in cream; she should not have been confined less than one month nor more than three; if she has had more than one child, all the better, for this will have given her some experience in the management of infants, which will add very materially to her other qualifications; she should be cleanly in her personal habits, and not addicted to the use of alcoholic stimulants, tobacco, or opium; she should have the most perfect command of her temper, and in no way given to the abuse of the animal propensities, living at peace with God and all mankind. And happy, indeed, is that child who, when deprived of its own mother, is so fortunate as to fall into the arms of such a nurse.

VI.—Artificial Feeding of Children.

But in the vast majority of instances it is impossible to procure a strange nurse, and we will be compelled to resort to artificial feeding. The article usually selected for this purpose is cows' milk; but it differs so much in the relative proportion of its constituents from human milk, that when given in a state of purity to very young children, it is apt to disagree with them, and unless it be so changed as to approximate the mother's milk, it will produce the most injurious effects, such as vomiting, diarrhœa, emaciation and convulsions, which, if not relieved, will speedily terminate the existence of the little sufferer.

Chemistry teaches us that the new-born babe requires for its nourishment proper quantities of oil, casein, albumen, sugar, fixed salts and water. In the mother's milk these constituents are provided just in proportion to fill every demand of the child for aliment. In the cow's milk this is not the case, as the following analysis of the two kinds of milk will show :

In cows' milk Timon found :

Water	857.0
Butter	40.0
Casein	72.0
Sugar and extractive matter	28.0
Fixed salts	6.2

In human milk he found :

Water	898.0
Butter	28.0
Casein	82.0
Sugar and extractive matter	36.0

Now, if these two tables be compared, it will be seen that cows' milk contains less water and less sugar than the milk of the human female. It also contains more casein and butter than the latter. This will serve to explain why it is that cows' milk, when substituted for the human's, is so disagreeable to the digestive organs of the young child. When, therefore, we are compelled to resort to cows' milk as a diet for infants, we should endeavor to bring the relation of the constituent elements as nearly as possible into accordance with the quality of the milk of the human female. For very young children we have generally found, that by diluting it with one part water and adding sufficient white sugar to make the necessary sweetness, it will agree with most children very well.

VII.—Animal Jelly a Useful Food for Children : a Case.

But we will occasionally meet with cases that will not tolerate the use of cows' milk in any form. I have met with instances in which it appeared to act like poison upon the young infant. What shall we do under such circumstances ? I will answer this question by reciting a case that occurred in my practice nine years since.

One beautiful *evening* in the month of August, 1853, a man and woman called at one of our hotels, and desired to remain all night. The woman was quite young and very beautiful. She had a babe, which she said was five weeks old. In the morning the man told the landlord that he had business in a neighboring town, and as it would not be convenient for his wife to accompany him, he would leave her in his care. The woman was very fashionally dressed, very attractive in her manners, and appeared very much attached to her child. On the third morning after her arrival, just about the time the mail train was due at our station, she made some excuse to go there, and leaving her babe in the care of one of the female servants, she never came back to look after its wants.

Being thus abandoned by its mother, it fell into the hands of a very excellent woman, who had had considerable experience in raising children by artificial feeding. The little stranger was a boy, and the day that he came under the care of his good nurse, he was in perfect health. His food for two or three days was equal parts of water and cows' milk. This appearing too strong for his digestive organs, it was still further reduced with water, and a small portion of white sugar was added. But this did not appear to mend the matter. His bowels became very loose, and his food was passed almost unchanged. His diet was now changed to a mixture composed of a half a teacup of water, a tablespoonful of cream, and a teaspoonful of white sugar. This appeared to agree with him very well for a few days. But by degrees his bowels again became very much relaxed, and the stomach very irritable, so much so that it retained but very little of the food that was given. He now commenced to emaciate, was very restless, and at times appeared to suffer from severe pain in the bowels.

This state of affairs continued about ten days, when early one morning he was suddenly attacked with convulsions, and I was called in to see him. His general appearance was that of a child in the collaped stage of cholera infantum. We ordered stimulating applications to the extremities, and a teaspoonful of the following every hour: ℞ Mucil. gummi arabici, ℥ j., oil of valerian, gtt. iv. M.

Under the use of this prescription the convulsions were promptly arrested, the extremities became warm, the pulse full and regular, and the stomach and bowels more quiet.

From the history of the case I was satisfied that any farther attempt to nourish him by any mixture that contained cows' milk was, in his present condition, out of the question. I therefore recommended the following: ℞ Calves-foot jelly, ʒ ij., cinnamon water, ʒ j., warm water, ℥ iv. M.

This, with the oil of valerian, was freely given for several days with the most happy effects. The little stranger's nervous powers were well sustained by the valerian, while the jelly was easily digested and nourished the tissues of the body most perfectly. This, with the addition of beef-tea and barley-water, constituted his diet for nearly four months, when a weak gruel, prepared from rice, and light bread softened in warm water, was gradually substituted. Frequent attempts were made to use cows' milk, but it always disagreed with the stomach, and had to be speedily discontinued.

I have also found animal jelly very useful in some cases where the mother's milk has disagreed with the child, especially where it produced colic, vomiting and diarrhœa. In cholera infantum I consider it almost a specific, if given in the form just described. I know of no article of food or medicine that agrees better with the stomach and bowels of young children than this. Milk and other substances that are used in artificial feeding, are not commonly very easily digested, and leave a very large quantity of excrement. Hence, when the mucous membrane of the bowels is very irritable, or inflamed, these excrementitous matters have a tendency to keep up the irritation, and render the case more difficult to manage. But animal jelly is easily digested, leaves but little excrement, and furnishes a large amount of nutriment, which is a matter of vast importance in all serious diseases of the stomach and bowels.

VIII.—Bread Jelly and other Articles of Food.

Another article of food which I have found very useful for very young children, when cows' milk does not agree with them, is bread jelly, and it may for common use be prepared in the following manner: A portion of soft bread is broken up, and boiling water being poured upon it, it is covered and allowed to steep for some time; the water is then completely strained off, and fresh water is added, and the whole placed on the fire, and allowed to boil slowly for some time until it becomes smooth; the water is then pressed out, and the bread on cooling forms a thick jelly, a portion of which is then mixed with water and sugar, for use as it is wanted.

As the child grows older and the digestive organs increase in power, the range of its diet may be greatly extended: beef-tea, rice, and barley-water,—all of which form a combination of vegetable and animal matter that constitutes a very salutary diet for many children. When a child has teeth to masticate solid food, bread and butter, boiled beef and mutton, potatoes, and boiled rice, and the like, may be given according to the wants of each case. The only drink allowable is water or milk and water. The practice of feeding children stimulating drinks is one that can not be too severely reprobated. Every physician should raise his warning voice against it. If the strength and vigor of manhood can not resist the deleterious influence of stimulating drinks, as has been fully demonstrated, what must be their effect when given to children? Besides proving ruinous to health by undermining the constitution and laying the foundation for future disease, thousands who have filled the drunkard's grave may thank the ill-directed kindness of their parents for a taste for strong drink acquired in infancy, which, in after life, has irresistibly hurried them on their downward course to wretchedness and death.

I am aware that there are some physicians who profess to believe that the moderate use of alcoholic stimulants will prevent the development of tubercular disease in children and adults. But nothing can be more delusive than this. The most superficial investigation will dissipate the idea at once. Alcoholic stimulants, when given to children in the form of punch, sling, essences, and the like, derange the digestive organs, prevent those changes in the food which are necessary to the formation of healthy chyle, and thus remotely interfering with the healthy nutrition of all the tissues of the body ; and in those children predisposed to tubercular disease, leading almost directly to its development, either in the brain, or some minor organ of the body.

We have been thus particular on the diet of young children, because we believe that a proper attention to it will greatly aid us in overcoming that constitutional diathesis, upon which the development of pulmonary tuberculosis depends in after life. Poverty of diet, either in the young or the old, must ever be regarded as a fruitful source of this disease. Good blood, the very life of the system, can not be elaborated out of scanty and slender fare. No person should be a glutton, but I would recommend all who have a predisposition to phthisis to live well. Indeed, a good substantial diet of animal food and vegetable aliment is necessary at all times to vigorous health. Deny this to the growing child, and you fearfully expose him to an early grave. Look then to his diet. See that his body is well nourished, and you will accomplish more in overcoming tuberculosis than in prescribing any of the famed articles of the materia medica, that are supposed to have any agency in that direction.

Proceedings of Societies.

Proceedings of the Cincinnati Academy of Medicine.

Reported by W. T. Brown, M.D., Secretary.

Hall of Academy of Medicine, April 20, 1863.

There being no essay presented, the reports of cases was announced to be in order.

Dr. Murphy—Said he was called to see a girl last Thursday, who had had for some time leucocythemia or leuthæmia, as it is termed by some authors; a disease characterized by a diminution of the red globules, and the increased number of the colorless corpuscles, and an increase of the watery elements of the blood. She had palpitation of the heart, occasionally an arrest of the menstrual discharge; she had also an enlargement of the spleen. Accompanying these disorders, there was a white waxy appearance of the countenance; the face, mucous membrane of eyelids and lips were perfectly pallid; cellular tissue puffy and bloated. He had known the girl for sixteen years. These difficulties commenced at puberty. She began to menstruate when seventeen years of age. Occasionally she would have an attack of convulsions, hysterical in character, brought on from nervous or mental depression. He had great difficulty in getting her to take, for any length of time, the great constitutional remedy, iron. But after taking iron for a few weeks, her appetite would return, pallor would disappear, and she would cease to have the paroxysms. Then she would leave off taking the iron, and the paroxysms would return. He had given her iodide of iron in two-grain doses three times a day for nine months. During the last year she menstruated irregularly. When she would have an attack of these hysterical paroxysms, she would miss her menses. Last Saturday she came home crying and very much depressed. She had a hysterical paroxysm. In the night she had a chill. Monday she had some cough. When he saw her she had a pulse of 120, what those who believe in the phlogistic theory of disease would call an inflammatory pulse; it was full and easily compressed, face flushed, crepitant ronchus to be heard over posterior part of left lung, dullness had already become distinct on percussion. She complained of severe pain along the cartilaginous part of the rib. She said she would die if he did not do something to relieve her of this pain. He thought the pain due to an attack of pneumo-pleuritis. He had her cupped to the amount of twelve ounces. She had diarrhœa. He prescribed three drops tinct. verat. viride and three drops tinct. opium every three hours. Friday her pulse was 75, She had veratrum viride; the pain had left her; she was vomiting, throwing up green bile. She was excessively prostrated. He gave her carbonate of ammonia At 2 P. M. she had rallied. He prescribed calomel, ipecac and opium, and blistered her. At 11 P. M. he visited her again with his friend Dr. Smith. Pulse 118 to 120, breathing quick, tubular respiration and crepitant ronchus increasing. She had a typhoid tongue and a tympanitic condition of her abdomen. She died Saturday night at 10 o'clock. The Doctor remarked that from the previous history of the case he was not prepared or inclined to make use of general depletion in this case when he first saw her. She had a typhoid pneumonia, as he regarded it, of three days' duration. He thought he would not deplete at all if he had to treat the case again, and was of the opinion she would have been cured had he been called earlier.

Dr. J. B. Smith—Said he did not think his friend Dr. Murphy had committed an error in his treatment, considering all the symptoms of the case. But she had not sufficient power of reaction; the blood was impoverished. When there is a perfect reaction patients usually recover. Mr. Chambers, of St. Mary's Hospital, London, reports case after case recovering with very simple treatment,—leeching or cupping followed with the application of warm poultices, and antimonials internally. In Dr. Murphy's case the congested condition remained. The cupping took from the patient a certain amount of vitality, necessary to carry her through the disease. The tendency to pneumonia often to assume the typhoid condition is due to a peculiar atmospheric influence. Depletion diminishes the reactive power. He thought no disease was cured by keeping up the depressing influence.

Dr. Murphy—Said he had the cups applied to relieve the violent pain which he attributed to the pleurisy.

Dr. Carroll—Said he had treated a girl within the last few days having sore throat. She was pale, but generally stout. He was sent for in the morning. He found pharyngeal inflammation, difficulty in swallowing, but little swelling of the tonsils. He opened a vein and bled her to the amount of twenty ounces. She was hard to make faint, but she vomited and perspired freely. She was much relieved. He then had her purged with salts, senna and manna, and she recovered in a few days.

Dr. Baker—Expressed his astonishment at his friend Murphy's treatment of the case he reported. He has in this Academy heretofore taken a positive stand against all means of abstracting blood, and said a great deal against the treatment our aged friend Dr. Carroll pursues. But now he reports a case where he abstracted blood, and that from a patient a medical man, understanding his business, would not take a drop. The patient was perfectly anæmic, represented as having pneumo-pleuritis. Under the circumstances, a gentleman advocating the principles his friend Murphy does, it astonished him he should bleed such a case. He thought the condition of the patient when the Doctor was called might have been relieved by warm applications. He would have given her morphine to quiet her. He would certainly have given her quinine and carbonate of ammonia. He would have given the quinine as a sudorific, and the ammonia as a stimulant, and applied poultices to relieve the pain, and then have treated her as symptoms indicated.

Dr. B. S. Lawson—Was not satisfied that it was a case of pneumonia. There was no evidence except the pain. There was no rust-colored sputa.

Dr. Murphy—Reminded the Doctor that there was crepitation.

Dr. Lawson—Received the correction, but said, at any rate, whether inflammation was present or not, there were several conditions that would forbid blood-letting. First, The condition of the pulse, and the nervous disturbance further depressing the circulation ; Second, If the girl had pneumonia already two days, consolidation had taken place, and it was too late to draw blood, the disease had continued too long ; Third, The continuance of the diarrhœa—that was bleeding enough, and far too fast. The diarrhœa, the nervous disturbances, and the time the disease had continued, were the three reasons for not resorting to bleeding. He would not have given veratrum viride, or used the lancet or cupped. There was sufficient blood taken to depress the circulation beyond the power of reaction. Transfusion would have been better. He would have commenced with brandy and quinine in small doses frequently repeated, and given opium to control the diarrhœa. But he was of the opinion she would have died any how, and he would not have the Doctor disturbed in his conscience.

Dr. Carroll—Reported a case of pneumonia of the left lung in the Commercial Hospital. The house physician reported to him the patient had a pulse of 125 when she came in, and that he had put her on tinct. verat. viride. In the morning when he saw her she had a pulse of 85. He thought the medicine had done her no good. On the contrary, that the congestion was further increased by its use.

Her skin was of a marble color. He discontinued the use of the veratrum. He purged her and kept it up for two days. At this time there is still congestion of the lung, but the tubes are more free. He did not have her bled, but she was salivated. Erysipelas commenced on the face, closing her eyes. He used nitrate of silver locally, and gave her one-eighth of a grain of antimony and one-fourth of a grain of opium every four hours for twenty-four hours, then increased the antimony to one-fourth of a grain for the next twenty-four hours. The third day he gave the medicine every three hours. To-day she wanted stimulants, but he refused her. She has a bellows murmur, produced by disease of the mitral valves. But he thought she would get well of her lung trouble. To-morrow he expected to give her bark and sulphuric acid, and mild food. The food is made into chyme first, then into chyle, and thus taken up by the lacteals. Brandy is taken by the veins of the stomach ; but if you overload the stomach, it is not taken up by them even in the sick person, but is thrown up again. Hence it is better to give food in small quantities. What do you expect by giving food in large quantities ? Why, the notion is absurd in itself. The stomach must be in a healthy condition to receive food. He had kept patients alive for days and days without feeding them, and mentioned the case of a member of our profession having typhoid fever, who lived for thirty days with little or no nourishment, and finally got well.

Dr. J. B. Smith—Said he was exceedingly astonished at his old friend's remarks, particularly in regard to typhoid fever. He seems to forget the cause of typhus and typhoid fever in Ireland. Their history shows that patients died from starvation. The only plan of treating typhoid fever is to feed it, to supply the proper elements of nutrition. What is inflammation of Peyer's and Brunner's glands ? It is a secondary trouble, and while you are treating this condition you are losing time, the vital powers are becoming more and more depressed.

Dr. B. S. Lawson—Said he was glad he had long since abandoned the doctrine of starving fevers. Starving would increase the mortality. Patients have died, and will die to all certainty, from this most pernicious practice. He would ask, how do you know the patient can not digest his food ? Starve him twenty days, no wonder his stomach will not digest his food. His friend Smith's views were in accordance with his own. There is no successful way of treating typhoid fever without feeding the patients. And give the food in a concentrated form ; give as little medicine as possible.

Dr. Carroll—Reported the following case for the purpose of expressing his views in regard to giving nourishment in typhoid cases. A young gentleman, aged twenty-two, applied to him on the 16th of February, for professional advice. He had been in the army and contracted the army diarrhœa. After treating him a short time he got almost well. He went out sleighing, drank and ate freely, diarrhœa increased, and typhoid fever followed. He had considerable flatulence and great emaciation. A homœopathist was called in, who treated him for three or four days, but becoming delirious, the homœopathist was discharged, and he was again called. The discharges from his bowels were of a thin light brick color ; there was some fullness of the abdomen, pulse over one hundred. The Doctor, believing there was ulceration, prescribed a quarter of a grain of opium, one or two grains of blue mass and half a grain of ipecac every four hours, applied fomentations over his abdomen, and had him rubbed gently with turpentine once a day. He was delirious, emaciation very great. He also ordered brandy in small quantities, but this disagreeing with his stomach, he prescribed half an ounce of Catawba wine every three or four hours. For food he gave him rice water and sugar, two or three tablespoonfuls every six hours. In three or four days he allowed him small quantities of soup. After ten days he came to as to his delirium. The brick-colored stools, which had continued up to this time, now disappeared. He gave him small quantities of bread and milk, limited to every four hours, continued the wine ; his pulse became more regular, not over one hundred. He began to sweat profusely at night. The Doctor said he pursued this treatment for thirty days, increasing his food a little every two or three days until he left him. He has since got quite well. He took this course because he considered that there was ulceration of the mucous membrane of the bowels ; that the mucous surface was denuded from the muscular, and probably the passage of food over the denuded mucous membrane would cause hæmorrhage. And he thought he was right. Gentlemen the other evening talked about feeding fevers ; that this was the only successful mode of treatment ; and one gentleman said that Graves had requested, if there was any epitaph put on his tombstone, it should be "that he fed fevers." He thought gentlemen could find this remark nowhere in the writings of Graves. Graves says, from the fourth to fifth day, give them light food every third hour. If it does not agree with them, wait a day or two and recommence, but only a few tablespoonfuls at once. After ten days, he advises chicken broth, half an ounce every three hours. If it turns sour, leave it off and return to vegetable diet, and so on until through the disease. He says also it is better to try them with food if they have no appetite. Graves was eloquent and educated, but in his debate with Broussais he missed it two or three times. Broussais said there was a difference between starving in sickness and in health. There is also a difference between morbid physiology and normal. When the secretions and excretions are morbid, they differ from a person with healthy organs. The case he reported at the last meeting, viz., that of Dr. Dodge, was an extreme case. He could not bear food. He had seen a hundred just such cases. Graves says much food produces flatulence. It produces ulceration. He would advise gentlemen to consider these things. The Doctor said he had a case of typhoid fever last summer. The rose-colored lenticular spots and sudamina were present. The patient, a young lady, had been sick several days when he was called. Her mother had been in the habit of visiting the military hospitals, and making egg-nogg for the soldiers. She had some prepared for her daughter, but he forbade her giving her daughter any. He never gave her a teaspoonful of brandy or wine, and but little food for a number of days, and she got well.

Dr. J. B. Smith—Said his friend Dr. Carroll certainly had not read Graves for eight or ten years. Stokes says of Graves that he fed fevers, and that Graves made the remark if he selected any epitaph for his tombstone, it was that he fed fevers. Now he was prepared to show the gentleman this remark, and he would bring the book at the next meeting. The Doctor said there was not a man occupying a distinguished position in the profession in Europe or this country who does not feed fevers. Stokes says, if local complications set in, pay no attention to them, but go on with your stimulants and tonics. Sweedie says the great cause of death is exhaustion. Inflammation of the glands of the bowels is due to the low condition of the plasma of the blood, depraved nutrition, etc. The true plan of treatment is to go behind all these conditions and improve the blood. Broussais localizes fevers. This is simply reducing the practice of medicine to a very simple formula. Now, in regard to the rate of mortality in our hospitals and in our army, he would say our army compares favorably with any army in the world, and far more favorably than the British army. The gentleman forgets the character of the men in our hospitals who have typhoid fever. They are men who have lived well at home, but in the army are exposed to all the hardships of camp life, and are brought into the hospitals broken down, with a depraved condition of nutrition. But his friend goes according to Broussais, thinking that food will cause ulceration. He believed fluid nourishment was taken up before it gets down to the ulcerated glands. He believed the disease self-limited, and his greatest fear was that the patient would die in the second week from exhaustion. He gave stimulants when the pulse was one hundred and twenty to one hundred and forty, and had it become reduced in frequency and the patient sleep quietly.

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Editorial Translations.

Syphilis communicated by Vaccination.

M. Devergie read before the Academy of Medicine, May 19th, a paper entitled "Tuberculous syphilide generalized in a boy fifteen years of age, with the presumption of infection by vaccination inoculated from arm to arm, at the Hospital Saint Eugenie."

Alfred Desire S., aged fifteen years, a cabinet maker, March 11, 1863, entered St. Louis Hospital. His father is dead from wounds; his mother enjoyed good health. Seven months previously Alfred Desire was under the care of M. Barthez, at Saint Eugenie, for a pleurisy. He left the hospital, cured, at the end of twenty-three days. Eight or ten days after his entrance into Saint Eugenie, he was vaccinated on the right arm with some matter taken from the arm of a nursing child. A number of children were vaccinated the same day with the same vaccine matter. The lancet which was used had not been used before, according to the declaration of M. Fritz, the *interne* of the ward. Three days after the vaccination a small brown crust appeared on the point of insertion of the matter. The crust enlarged and the skin became red; the boy did not say anything about it, and did not have his arm examined before leaving the hospital, nor during his stay in the convalescent house. However, during this time not only the primitive redness persisted, but it extended, without any inconvenience being felt by the boy. Five or six weeks afterwards, an eruption of *boutons* on the arms and thighs; thickening of the skin around the colored point of the arm; two new eruptions of *boutons* more extended; hoarseness towards the third month; osteoscopic and rheumatic pains. On his admission into St. Louis Hospital, (March 11,) papular eruption over the whole surface; impetigo of an elliptical form on the upper lip ; three tubercles of recent origin and indurated, on the prepuce ; some enlargement of ganglia in left groin ; in the neighborhood of the vaccination, on the right arm, a round surface where the skin is thick, hard, unequal, and of a sombre red ; ganglia of the armpit voluminous and indurated on the right side only. The anus is healthy, and presents none of the characteristic signs of syphilis. Anti-syphilitic treatment (iodide potas. pills of Dupuytren) was followed by improvement at the end of six weeks ; impetigo of the lips cured ; all the tubercles have become more pale ; the skin around the vaccination has become supple, discolored at its circumference; hoarseness has disappeared ; health excellent.

The diagnosis of the disease, says M. Devergie, has not been doubtful a single moment. At present, as the symptoms are notably diminished, they have not, however, yet raised the least uncertainty on the part of the members of the Academy to whom the boy has been shown.

What is the point of departure of these accidents ? There is the whole difficulty. We have not the certificate of its origin ; perhaps we may be able to obtain it in consequence of the efforts on the part of the administration of the hospitals. We have not found on the penis of the boy any trace of chancre. The facts which he has given accord with that which science has taught relative to the evolution of syphilitic accidents. All these reasons establish strong presumptions in this case on the inoculation of syphilis by means of vaccination.

M. Ricord—Admitted that he had denied the transmissibility of syphilis by vaccination. For a long time demonstrative facts have failed, and everything justified us in denying it. But observations have multiplied, the proofs have accumulated, and the demonstration is at present so convincing that it is not permitted to any one to hesitate to accept as certain this mode of transmission. Recently still we observed in the service of M. Trousseau an analogous case to that of M. Devergie. But, in spite of all, that which is certain is, that in one way or another the syphilitic accidents were not the result and as the explosion of an anterior and latent constitutional syphilis. In two patients the infection was recent, and the vaccinal puncture had evidently served as the point of entrance of the syphilis. Nevertheless, in spite of the facts collected up to the present, a question remains still to be solved : it is that relative to the conditions in which the vaccinated person must be found in order to transmit syphilis. Here is all the obscurity—all the confusion.

At best, what presumption can be drawn from the examinations of the parents or the child ? A child born syphilitic may present at birth, and for a long time afterwards, the most perfect appearance of health. It could then at the time when it is vaccinated present no manifestation of constitutional syphilis. The father and mother might equally, however syphilitic they may be, preserve no trace of the primitive accident, and present actually no secondary sign of the disease. Then there is another difficulty—another mystery : the father according to the law, *pater quem nuptiæ demonstrant,*—is he always the father according to nature ? Alas, no ! It is this fact which may cause a child to be syphilitic, although its legal father may not be so ; and consequently it is barely possible, in some circumstances, to assure the health of the child from that of the father.

Can we learn anything from the age of the child ? No. The epoch when the constitutional symptoms of syphilis break out with children is very variable. These symptoms show themselves rarely before birth ; we do not see them appear, as a general rule, before the end of six weeks or two months, or even in the fifth or sixth month. This uncertainty in the manifestations of hereditary syphilis leads us to the fact that age does not authorize us to prejudge anything.

Is it possible for us to be instructed better by the puncture and the vaccinal eruption ? If in some exceptional circumstances the vaccinal *bouton* has appeared suspicious or gives place to doubt, in the immense majority of cases, as in that of M. Devergie and M. Trousseau, the vaccinal eruption offers no specific character, and has all the appearance of the best vaccination.

M. Ricord concluded from all these considerations, that very often, the oftenest even, no index could enlighten the physician on the state of the health of the child vaccinated, nor of the quality of the vaccine matter which is used ; that we could not consequently place on the operator the responsibility of a transmuted syphilis by vaccination.

M. Gosselin—Is very ready to believe that syphilis may be transmitted by vaccination ; but it is a fact so grave that he would not wish any one to pronounce it until he had proved it by all means. It would be necessary, for example, to know and examine the parents of the vaccinated child, to follow the child, and to know what happens to all those who are inoculated with its vaccine matter.

M. Devergie—Said that he had commenced an inquiry of this kind, and that he relied on the well known zeal and devotion of M. Husson, director-general of *assistance publique,* to carry it out.

M. Depaul—Has been for a long time convinced of the contagion of secondary accidents, and especially of the transmissibility of syphilis by vaccination. Science possesses at present on this subject facts very authentic and more complete than the one reported by M. Devergie, which assuredly is not sufficient by itself to be convincing. He desired to place himself in opposition to the opinions emitted by M. Ricord. He believed that we can very easily recognize in general, and by certain signs, a child attacked by hereditary syphilis. For it is an error to pretend that the most part of syphilitic infants present at their birth, and for a long time after, the best appearance of health, and that the accidents do not break out until the age of two, three and six months. Such an opinion can only rest on an incomplete or superficial study of the question. The truth is, that constitutional syphilis manifests itself ordinarily in infants from the birth, or from the first weeks, either in the form of pemphigus neonatorum or by other symptoms less evident, perhaps, but not less characteristic for a severe observer, for a careful *clinicien*. M. Depaul did not think that he had ever been deceived, either in his hospital practice or that of the city, or in the vaccine service in which he had served with M. Bosquet. He had examined with the greatest care all the children who were brought to him by their mothers, and he declared that after this double examination he was so sure of the vaccine matter which he employs that he would not hesitate to vaccinate himself with it.

M. Ricord—Congratulated M. Depaul on the kind of immunity which he enjoyed from the academic vaccine matter; but in his opinion that simply proves that the transmission of syphilis by vaccination is very rare and very difficult. For what serious guaranty can be offered for all those children which are brought from all quarters to the Academy to be vaccinated? Do we know from whence they come, and who are their parents? We must, then, attribute not only to the skill of M. Depaul, but perhaps also a little to chance, the happy fact stated by the honorable vaccinator. M. Ricord has not certainly seen as many new-born children as M. Depaul; but he believes he has seen as many syphilitic ones as the gentleman. He says with great certainty that he has rarely seen constitutional syphilis manifest itself at birth, while he has often seen it, and the most frequently, not show itself until two or three months after.

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NEW TESTS FOR DIABETIC SUGAR.—MM. Trousseau and Dumontpallier have been recently making some experiments with tincture of iodine as a test. This tincture, when added to urine which is acid, imparts a deep color to the fluid, and if the urine in jaundice be treated by some drops of the tincture, the green matter, termed biliverdine, is rendered very manifest.

Correspondence.

Letter from Boston, Massachusetts.

Boston, Mass., July 9, 1863.

Messrs. Editors: — The annual meeting of the Massachusetts Medical Society was held on the 17th of June, at Pittsfield, in the extreme western part of the State. This town is the seat of the Berkshire Medical School, and is noted for its rural beauties and the hospitality of its inhabitants. The large number of Fellows present received a most generous welcome, both from the profession of the place and the citizens. Many of them visited Maplewood Institute to witness the calisthenic exercises of the young ladies, and also New Lebanon, to examine the extensive laboratory of the Messrs. Tilden, whose medicinal agents are so well known by the profession at large.

Delegates were present from the State Societies of New York, Connecticut and New Jersey. Delegates were appointed to visit the Societies of these States, and those of all the New England States, at their next regular meetings. There were but two papers presented, one by Dr. H. R. Storer, of Boston, on Anæsthetics in Obstetric Surgery and Medicine, and one by Dr. Swinburne, of Albany, N. Y., on the subject of Ambulance Corps.

Dr. Morrill Wyman, of Cambridge, gave the annual address. It was an interesting argument in support of the legitimate claims which medicine has upon the confidence of the public—that medicine was a *reality*, not a *nullity*.

The dinner tendered by the citizens of Pittsfield was enough to satisfy the most delicate epicurean taste. Long may the good people live to dispense their hospitality! Several distinguished guests were present; among them Dr. March, of Albany, the President of the American Medical Association. No public action was taken by the Society on Surgeon-General Hammond's Circular No. 6; but strong disapprobation was expressed by many Fellows, in private conversation, at the course pursued in issuing the order prohibiting the use of calomel and antimony in the army.

Dr. O. W. Holmes pronounced the annual oration before our municipal authorities on the 4th inst., at the Academy of Music. It was an able and eloquent production, and to speak of it medically, one could say that the Doctor examined the present rebellion in all of its parts; traced out its premonitory symptoms; diagnosticated its present status; and submitted the only rational mode of treatment to secure a favorable prognosis.

From the City Registrar's Report for 1862, I learn the following facts: The number of children born during the year was 5258; males 2690, females 2568, a decrease from the number of the preceding year of 531. In six wards the ratio of births to the whole number born was less than that of the deaths in the same localities. In 1345 instances both parents were born in the United States; in 2295, they were natives of Ireland; in 3913, one or both parents were foreign born, being 74.42 per cent.; which shows that only one-fourth of the children born have an unmixed native parentage. The colored children numbered 22 males and 23 females. There were 47 twin births. In 14 instances both children were males; in 13, both were females, and in the remainder there was one of each.

There were 2094 couples married, being a decrease from the previous year of 72. Of the number of grooms, only 258 or 12.32 per cent., were born in Boston, and of these only 111 married Boston-born brides. The number of native-born grooms was 997, or 47.61 per cent. of all the grooms. Of these 540, or 54.16 per cent., were born in Massachusetts; 34.64 in other New England States; 11.11 per cent. in other States. Of the 1097 foreign-born grooms 59.52 per cent. were born in Ireland; 182 native grooms married foreign-born brides; 337 brides, or 18 per cent. of the whole, were born in Boston; 34.81 per cent. of the grooms were married between the ages of 25 and 30, and 43.40 per cent. of the brides between the ages of 20 and 25. Only 337 brides married after they had reached the 25th year, while 687 grooms sought the charms of wedlock beyond the age of 30. There were 39 grooms married under 21 years of age, 23 of whom married brides under 20; 9 grooms under 21 united with brides under 18; and 8 between the ages of 25 and 30 took wives between the ages of 30 and 40; while one romantic individual of that age wooed and found solace in a bride of 50. One groom of the ripened age of 75 found favor in the eyes of a spinster of 25; while another of the same age joined his hopes with a bride at the green old age of 78. The youngest couple married were each 18. Four brides were only 15. It was necessary to obtain the written consent of parents in 50 instances from the youthfulness of the gentler sex. In 257 instances the brides were older than their husbands.

32 marriages occurred where both parties were colored, and 6 where the grooms were colored and the brides white. One groom of 28 was united to a white girl of 17.

Of the grooms 1670 were residents of Boston at the time of marriage; 324 of other towns in the State, and 100 were non-residents; 1770 brides were residents of the city, 240 in other parts of the State, and 84 out of it: 82.14 per cent. of the grooms were married for the first time, and 86.72 per cent. of the brides; while there were 325 second marriages among the former, and 266 among the latter class.

There were during the year 4120 deaths, being an increase of 157 over that of 1861. The ratio of deaths to the population was one in 48.54. The deaths of American-born males (exclusive of children of foreign parentage) were 18 per cent. of the entire mortality, or 35 per cent. only of all the males. The deaths of the foreign-born, including children, amounted to 64.43 per cent. The mortality among females, native-born, was 16.84 per cent. of the whole number of deaths, and 34.11 of all the females. The casualities of all kinds numbered 107 males and 35 females.

It would be interesting to note the causes of the deaths, and many other recorded items, but space will not permit. B.

Circular No. 6 Again.

Messrs. Editors:—There is, it appears to me, room for a few more words about this exciting Circular, that will be likely to do good without being open to the liability of having the opposite tendency.

If I do not attempt a rejoinder to the editorial remarks in your last number about the Circular and myself, it is not because I did not attentively read what you wrote and endeavor to compass the spirit in which it was dictated, but for other reasons not necessary to recount to attain my present aim.

The point I wish to present at this time may be stated as follows: The Surgeon-General by issuing Circular No. 6 does not, and did not intend to, prohibit the use of calomel and tartar-emetic by army surgeons. The effect of the Circular is to call attention to the abuse of calomel and the non-necessity for the use of tartar emetic, and then take them both from the list of ordinary drugs furnished the army, as a matter of course, and place them on the extraordinary list, where they can be obtained by a special requisition.

This is the position I supposed these drugs were placed in by the Circular when it first appeared, and so stated in the discussion of the subject in the American Medical Association at Chicago; but several parties whose opinions on the construction of military papers I believed to be entitled to respect, asserted positively that the Circular peremptorily closed all regular channels of obtaining either of these remedies by military surgeons, and I yielded the point.

My original opinion is confirmed by a circular letter from the Surgeon-General, published in the *American Medical Times* of July 4th, wherein it is stated that Circular No. 7, dated three days after Circular No. 6 was issued, contained the supply-table, embracing seven different preparations of mercury, and notifying all concerned that drugs not named in the table could be had by a special requisition. This, it appears to me, takes away all objection to Circular No. 6 that could be entertained by reasonable men without prejudice and enlightened by modern medical science.

By withdrawing calomel and tartar emetic from the general supply table and placing them on the special list of medicines, the Surgeon-General has left them where they can be made to achieve all the good of which they are capable, and has, at the same time, probably, succeeded in checking much, if not all, the mischief they have heretofore been the instruments of accomplishing in military practice.

Circular No. 6 will mark an epoch in practical medicine in civil, as well as in military life. It will set men thinking, and stir up inquiry that can not fail to result in good. Whatever the issue of all this commotion it has caused, a prophetic vision can not but see truth at the end, as the result of the effervescence.

Richmond, Ind., July, 1863. JAS. F. HIBBERD, M.D.

Reviews and Notices.

A Practical Handbook of Medical Chemistry: by JOHN E. BOWMAN, F.C.S., formerly Professor of Practical Chemistry in King's College, London. Edited by CHARLES L. BLOXAM, Professor of Practical Chemistry in King's College, London. Third American from the fourth and revised London edition, with illustrations. Philadelphia: Lea & Blanchard, 1863.

Very few physicians in active and general practice but have frequently felt the necessity of such a manual as is afforded by Mr. Bowman. In this little volume we have condensed ready for use as large an amount of important information as could well be put in the same space.

Part I. is devoted to the urine. Healthy urine, with microscopical views of its chief constituents: urea, uric acid, hippuric acid, etc.,

etc.; quantitive analysis of healthy urine; composition of urine. Then we have several chapters devoted to examinations of morbid urine; the tests for sugar, abnormal proportions of the healthy constituents, albuminous urine, pus, etc., etc. Just at the present time when special attention is being paid by pathologists to these abnormal conditions of the urine, a reliable handbook, which gives all these instructions in such convenient shape, becomes one of our most useful works of reference.

Part II. is devoted to calculi and concretions.

Part III. treats of the blood, wherein we have the same character of discussion given as in the consideration of the urine; its healthy constituents, its quantitive analysis, examinations of morbid blood.

Part IV. is miscellaneous. It has chapters on milk, bile, mucus, pus, bone, examination of mixed animal fluids.

Part V. is a very important part of the book. It is devoted to the "detection of poisons in organic mixtures." The various tests for arsenic, and details for examining suspected organic mixtures, tissues, etc., and testing the presence and quantity of arsenic. In like manner are added chapters on antimony, mercury, lead, copper, zinc, iodine, sulphuric acid, hydrochloric acid, nitric acid, oxalic acid, prussic acid, opium, strychnine, nicotia, phosphorus and alcohol.

Chapter XVIII. of this division gives a "general systemic course for the detection of poisons in organic mixtures," and Chapter XIX. details the separation of poisons from organic mixtures by dyalisis; being a brief synopsis of the plan pursued by Mr. Graham.

We have given but little more than a table of contents of the book before us, but this will serve better than anything else we could say to exhibit the plan and practical scope of this useful little book.

For sale by Robt. Clarke & Co. Price $1.25.

A Practical Treatise on Fractures and Dislocations: By FRANK HASTINGS HAMILTON, A.B., A.M., M.D., Lt.-Col.; Medical Inspector, U.S.A.; Prof. of Military Surgery, etc., etc., in Bellevue Medical College, etc., etc., etc. Second edition, revised and improved. Illustrated with two hundred and eighty-five wood cuts. Philadelphia: Blanchard & Lea. 1863.

Something more than three years ago, the first edition of the work before us made its appearance, and was favorably noticed in this journal. We feel a degree of professional gratification that a new edition has been demanded. In his preface Dr. Hamilton says he has sought to render it a "faithful record of the progress of that branch of surgical science of which it treats. With this view some portions have been amended, some paragraphs have been excluded, and considerable additions have been made. The short chapter on 'Gunshot Fractures' seemed to be demanded at this moment, and especially as the work has been placed upon the United States Army supply-table for post and general hospitals."

Dr. Hamilton was industriously engaged for many years in collecting the materials of this work, and we believe he has produced the most complete and useful work upon this branch of surgery extant in the English language. Indeed, in most respects we know of no book that will at all compare with it. The author has given cuts and descriptions of almost every conceivable splint and apparatus for fractures. At first this would seem to be almost an unnecessary fullness, but there is a two-fold value in this vast storehouse of resource. We have not only the expedients of a variety of our best surgeons, apart from the particular apparatus approved by our author, but we are enabled to perceive the objections of an endless variety of fixtures which have been now and then devised by ingenious surgeons, but have been found inferior. Thus we are often prevented from repeating useless experiments. Indeed, in the way of illustration, we think this volume is the most complete we ever saw. It has already been suggested by some critic that Dr. Hamilton has omitted an important topic in that he has given no chapter on fractures of the skull. We repeat the criticism, and express our wonder that he has not treated of this form of fracture, and taken the occasion to bring up the newest doctrines on the use of the trephine.

The added chapter on gunshot fractures is very brief, though considerable has been added to the general context under individual head. In the way, however, of general axiom he sums up the following general teachings:

"If an attempt is made to save a limb badly lacerated and broken, certain conditions in the treatment are necessary to success.

"All projecting pieces of bone which can not easily be replaced, and are not firmly attached to the soft parts, must be at once cut or sawn away.

"All foreign substances, such as fragments of balls or other missiles, pieces of cloth, wadding, dirt, etc., must be removed.

"Any portion of integument, fascia or muscles, which are entangled in the wound, and prevent a thorough exploration, or may obstruct the free escape of blood or of matter, must be freely divided.

"Counter openings must be made at once, or at an early period after formation of matter, to secure its easy escape.

"The limb must be placed in an easy position, and not confined by *tight* bandages, or *forcibly* extended by apparatus.

"The inflammation must be controlled by constitutional and local means, and especially by the use of water lotions whenever its employment is practicable."

We heartily commend this work to our readers.

For sale by Robt. Clarke & Co. Price $4.75.

Editor's Table.

Clerical Quackery.—The relations between physicians and clergygymen ought to be of the most unreserved, confidential character. Thrown together, as they so frequently are, at the bedside of the sick and dying, there would seem to be a natural bond of sympathy attracting the members of these two professions very closely together. We are satisfied that the vast body of the cultivated portion of these two classes have always entertained this pleasant feeling for each other. Hence, through the progress of time a mutual interchange of good offices naturally sprung up. Hence, in part has grown up the disposition on the part of the medical man to regard his clerical neighbor as a professional brother and friend, for whom he should have more than ordinary regard and to whom he should extend more than usual courtesy. We regret that this disposition for courteous relations has not always been duly appreciated. Indeed, we are sorry to record that it is sometimes most shamefully abused.

Perhaps we publish no slander when we allude to the well known fact that too often clergymen have been the most unblushing trumpeters of unprincipled quacks, the extent of their ingratitude to the good offices of regular medical friends being in proportion to the extent of their influence and consequent capacity for mischief. One of the most extensive, active and useful Protestant denominations of the land held within its pale, less than twenty years ago, a body of ministry quite as devoted to quackery in every aspect as they were to the peculiar tenets and customs of the sect. With the progress of a higher degree of intellectual culture, with a broader humanity, with a heartier appreciation of the proprieties of life, we had good reason to believe that but a small amount of this old leaven remained. Here and there we might find an old remnant of the palmy days uniting in his single sacred person doctor and priest; devoting his Sabbaths to sanctimonious sermonizing of a very "unctious" character, and his week days' interim to wise criticisms on sickness, disease, medicine and the "regular" doctors, sadly enough mixing up pills, prayers and potions; but the *noves homines* are men that we respect for the most part, for their high appreciation of our calling, as well as the able manner in which they devote their energies to their own.

We are sorry to say, however, that one of the most powerful engines for usefulness and effect in the Church to which we refer, is fast being prostituted to the lowest grade of quackery. We refer, of course, to its press. We mean the entire church-press; though, just at present, this reflection is called out by the persistent devotion of the *Western Christian Advocate* of this city to this interest, in despite, as we understand, the protestations of some of its most influential membership. In the earlier days of this widely-circulated weekly, no advertisements were admitted in its columns beyond the business matters of the church and "Concern." But, recently, the Church determined to greatly enlarge the size of the sheet. Henceforth it is to be an octavo. It goes forth to more than thirty thousand subscribers—more than a hundred thousand readers. It must be metropolitan in its dimensions. We regret to say, in some of its other features it is decidedly metropolitan. With this increase of size the agents determined to make it a pecuniary blessing to the Concern also, and they threw open its columns to advertisers, knowing very well that with so vast a circulation and with its religious character it would be eagerly sought after. We believe one of the first operations in this direction, of special dimensions, was a prominent column, announcing the virtues of "Spalding's Cephalic Pills." These pills didn't "work" as well as was proposed, and we infer they didn't altogether relieve the "headache" of the establishment. Subsequent ventures have probably paid better; at any rate they continue. We make no effort at selection, but take up at random a number of the *Advocate*, which proves to be that for July 8th ult. As a matter of amusement, let us take up its quack cards *seriatim*. It will be seen that we have but little space to spare after cataloguing the collection.

First we have "Mrs. Allen's Hair Restorer," "The Granville Water Cure," "Artificial Ears or Sound Magnifying Tubes." Then "Dr. Strickland's Vegetable, Purifying, Anti-Bilious Pills," "Dr. Strickland's Anti-Cholera Mixture" and "Dr. Strickland's *Mellifluous* Cough Balsam," (perhaps these last should not be embraced in our catalogue, as Dr. Strickland himself assures us they are *not* quack remedies.) Next we come to the somewhat imposing card of "Rev. W. Harrison, M. E. minister, ofthe Black River Conference," (sorry to hear that slander on old Black River) who announces that after "being cured of consumption himself in its *worst form*" (only think!) "by an English doctor, obtained the recipes, and as a duty to the suffering, offers the remedy that will cure—in many of its stages—consumption," etc., etc., etc. "Cash, greenbacks, or Eastern money with orders. One package, $2.00"!! (Duty!) We suppose Rev. Dr. Harrison had some troublesome lung complaint as the result of his clerical imprudencies, and of which some benevolent neighbor doctor cured him without any fee, and this is the return.

Well, next comes "Rogers' Vegetable Worm Syrup;" then the inevitable Dr. James, that "retired physician of great eminence," that also discovered a certain cure for consumption, etc., etc., and desires before his sands of life have entirely tumbled out of the hour-glass to impart the same as a matter of "duty"—and for a consideration. Another lung panacea, "Hall's Balsam," follows in order. "Baker's Pain Panacea," "Scovill's Blood and Liver Syrup." Some quack oculist of Columbus comes next in suit. "Scovill's Hair Restorative," "Dr. Mott's Vegetable Liver Pills," "Dr. Roback's Stomach Bitters." Still another "Hair Restorative," "Sandford's Liver Invigorator," "*Mrs.* Winslow's Soothing Syrup," a brief notice to consumptives; and, finally, the card of a quack concern on Sixth St., styled the Cincinnati Surgical Home, with "the best facilities to those desiring surgical operations for cancer, fistula, etc., etc."

There, dear reader, that's the list for one week. We venture to say there is no newspaper in this city can boast such a showing of nostrum and quack advertisements in any one issue. It only lacks the column devoted to Dr. Raphael, and one or two more, to make up a complete assortment.

While we are at it, we notice an item or two in the news department of this same issue which seems *timely*. One is a paragraph puffatory of one of the above cards. We have no means of knowing whether both are *paid* insertions, but the coincidence is peculiar. The paragraph is simply a silly account of the removal of a "rose cancer" from somebody's head away out in Western Virginia by Dr. Scudder (of the Surgical Home.) It is stated that this huge cancer has been removed now some *ten days!* "and thus far it would seem that the cure is likely to be permanent." So? This paragraph is a selection from the *Free Nation*, whose editor also seems disposed to pander to quackery in a good-natured sort of way.

Our friend House also appears medically disposed in this same issue. He has found a wonderful story of somebody having swallowed a set of false teeth, and but for the persistent and finally successful efforts of some *ingenious* physician, we are credibly informed "that recourse must have been had to the desperate and dangerous expedient of cutting into the stomach!" It is to be regretted that we are left in the dark as to the peculiar process by which that set of teeth was fished up from the *de profundis*.

We have occupied more space with this matter than we thought or expected, and we will only add a word or two. What we have written has not been with pleasure. Our personal esteem for those who control the journal in question is too sincere to admit of any question of pique or malice. We simply feel that it is a burning shame and disgrace that a paper, otherwise of such distinguished ability, should so cater and pander to what its conductors themselves very well know is false and mischievous. It will not do for its conductors to say, "We are not accountable for the advertisements which appear in this paper. Our readers must take them on their face for what they are worth; they belong to the business department of the Concern, and are purely business matters." The editors in substance have already said this, but it is not true. Everybody knows that to this extent the influence, the vast circulation, the respectable character of this newspaper is by so much transferred to the interests of these charlatans and vampires who use its columns in this way. As well do the advertisers of certain pills caution the purchaser in carefully worded italics, that they are not to be used by ladies in certain interesting conditions, when the rascals know very well that these are the only conditions for which they are used.

Let us briefly illustrate how the influence and tacit endorsement of the editors and publishers of a religious newspaper operates. A regular reader of the *Advocate* or the *Ladies' Repository* down in Indiana, or some of the interior counties of Ohio, has a daughter who, just as she has reached the beauty and promise of grown-up life, manifests the blight of consumption. The family physician makes an intelligent examination of the case, and assures the anxious father that there is no hope. A careful palliative treatment will prolong and soothe the remaining days, but nothing more. It is hard to accept the sentence. He feels that he must catch at any ray of hope. He sees week after week the glowing promise held out by "Wolfe's Medicated Inhalations." He reasons within himself, surely Dr. Clark, and Dr. Kingsley, and Bro. Poe know all about these things, and if there wasn't something good in it, they wouldn't suffer it to appear in their columns, even as advertising matter. So he visits the city, pays twenty-five dollars for a consultation, buys the necessary apparatus, and with fees, medicines, traveling expenses, etc., he is thus swindled out of perhaps fifty or sixty dollars. Happily, indeed, if no more serious mischief is done than the mere loss of money. We *know* of like instances. They might be detailed in profusion; and, we repeat, the theory is not good, that it is only a business matter. Why don't the *Advocate* advertise *theatricals, Dr. Bonaparte,* and other matters unnecessary to name. Simply because here is a matter so palpable, that the public would hold the paper responsible for the influence it would be lending to these institutions. The thing is inseparable. Influence and respectability *are* given by *any* paper to its entire contents, just in proportion to its own accepted character and supposed respectability.

And now if the great Church represented by the *Advocate* is about to retrograde, and become in its newspapers, clergy, and consequently its people, given over to the practice and worship of quackery and all the miserable cheats foreshadowed in this number of the *Advocate* before us, some of its communicants would like to know it. But we do not believe the body of its supporters care to have the pecuniary interests of any department of the Church built up at such a price. We are able to care for these interests in a more legitimate way.

Medical College of Ohio—Summer Course.—The Medical College of Ohio held the commencement exercises terminating its summer course of instruction at the College edifice on Monday evening, July 6th.

The degrees were conferred by Flamen Ball Esq., President of the board, to twenty-seven graduates. In the course of his accompanying address he stated that the exigencies of the times, especially the great demand for army surgeons, had induced the Board of Trustees to assent, against their well established judgment, to an extra summer course of lectures in the College, for two years past. He presumed there would never again occur any pressing necessity for this invasion of the habit of the school and the judgment of the profession; and that this would doubtless be the last summer commencement occasion this College would ever afford.

Prof. M. B. Wright addressed the graduates in valedictory. The following is the list of graduates:

Thomas C. Baird, Pennsylvania; Geo. W. Beal, Ohio; Homer Bean, Ohio; Simeon S. Bicknell, Wisconsin; Wm. Buckworth, Illinois; Wm. M. Clark, Ohio; Wm. Commons, Indiana; Geo. F.

Cutter, Illinois ; Thaddeus W. Egbert, Pennsylania ; John E. Fackler, Ohio ; John H. Finfrock, Ohio ; Geo. W. Fitzpatrick, Missouri; Wm. B. Hedges, Ohio ; Wm. Q. Insley, Indiana ; David N. Kinsman, Ohio ; Wm. A. McCracken, Ohio; John H. Oney, Kentucky; Wm. E. Patterson, Ohio; Elijah F. Purdum, Ohio ; W. H. Race, Ohio ; Wm. T. Ropp, Ohio ; David Rush, Ohio ; Wm. E. Ryon, Kentucky; James W. Vandervoort, Ohio ; Daniel H. Webster, Missouri; Granville S. Wellons, Ohio; Albert F. Ziegler, Ohio.

Doctors' Quarrels.—Despite the popular opinion upon this subject, our own notion is that doctors are quite as amiable toward each other as members of other callings, trades and professions. We have seen even staid and white-neckclothed clerical gentlemen quite as lacking in broad and generous charity as ever we observed in our brethren of the lancet. The following very good story, however, at our expense, is told by the author of "The Book about Doctors," which we give for its spice:

> A London druggist once put up at the chief inn of a provincial capital, whither he had come in the course of his annual summer ride. The good man thought it would hurt neither his health nor his interests to give "a little supper" to the apothecaries of the town, with whom he was in the habit of doing business. Bent on giving practical expression to this resolve, he sallied out from "The White Horse," and spent a few hours in calling on his friends, asking for orders, and delivering invitations. On returning to his inn, he gave orders for a supper for twelve, as eleven medical gentlemen had engaged to sup with him. When the hour appointed for the repast was at hand, a knock at the door was followed by the appearance of guest A., with a smile of intense benevolence and enjoyment. Another rap, and guest B. entered. A. looked blank, every trace of happiness suddenly vanishing from his face. B. stared at A. as much as to say, "You be ——!" A. shuffled with his feet, rose, made an apology to his host for leaving the room to attend to a little matter, and disappeared. Another rap, and C. made his bow of greeting. "I'll try to be back in five minutes, but if I'm not, don't wait for me," cried B., hurriedly seizing his hat and rushing from the apartment. C., a cold-blooded, phlegmatic man, sat down unconcernedly, and was a picture of sleeping contentment till the entry of D., when his hair stood on end, and he fled into the inn yard as if he were pursued by a hyena. E. knocked and said, "How do you do?" D. sprung from his chair, and shouted "Good bye!" And so it went on till, on guest No. 11 joining the party that had received so many new comers, and yet never for an instant numbered more than three, No. 10 jumped through the window, and ran down the street to the bosom of his family. The hospitable druggist and No. 11 found on a table provided for twelve quite as much supper as they required.

Next morning the druggist called on A. for an explanation of his conduct. "Sir," was the answer, "I could not stop in the same room with such a scoundrel as B." So it went down the line. B. had vowed never to exchange words with C. C. would be shot rather than sit at the same table with D.

"You gentlemen," observed the druggist, with a smile to each, "seem to be almost as well disposed amongst yourselves as your brethren in London; only they, when they meet, don't run from each other, but draw up, square their elbows, and fight like men."

Ohio State Medical Society — Omissions.—In the report of the proceedings of the Ohio State Medical Society, as given in the July number of this journal, the following committees had by oversight not been furnished to the Secretary, and were, therefore, omitted.

UTERINE DISEASES.—Dr. G. W. Boerstler.

MEDICAL COLLEGES — *Medical College of Ohio.*—Drs. Conklin, M. Dawson and Metz.

Cincinnati College of Medicine and Surgery—Drs. Beaman, Gans and Landon.
Cleveland Medical College—Drs. Dalton, Reeve and Reisinger.
Starling Medical College—Drs. Sweeney, Mitchell and J. G. Rogers.

Deserved Promotion.—We notice with pleasure the promotion of Dr. J. C. Denise, of Dayton, Ohio, to the surgeoncy of the Twenty-Seventh Regiment O.V.I. Dr. Denise has been serving as assistant-surgeon almost ever since the outbreak of the rebellion. He has served faithfully and well, and deserves his promotion.

Our Bills.—As announced in our last month's issue, with this number we send bills to all subscribers in arrears to the *Lancet and Observer;* and as stated then, we have made out these arrearages for $3.00 per annum. We have endeavored to keep our rates at $2.00, and to all paying in advance or without giving us trouble in collecting, we have gladly receipted at that rate; but it has been at a sacrifice and risk that is scarcely justifiable. As illustrative of the greatly increased expense of book and journal publishing, we note a statement from Blanchard & Lea, leading book publishers of Philadelphia, to the effect that owing to the "greatly enhanced cost of materials and labor," they are obliged to make a small advance in the price of their publications, and in a few instances change the style of binding from leather to cloth. They make these changes with reluctance, "and can only hope they will not be forced to further modifications by a continued increase of cost." Now we make no modification of our terms—they are well known, and distinctly ennunciated: "$2.00 in advance, otherwise $3.00"—we prefer even at this difference the strict advance payment. Doubtless we have sent bills to some who may have remitted their dues, and quite as likely overlooked a few names not paid. We shall, of course, make all corrections with pleasure. We regret also that a few of our old subscribers have suffered their arrearage to accumulate. We trust as we have of late said so little in our columns on money matters, that we shall be gratified with a full and prompt response.

Cincinnati Academy of Medicine.—Agreeably to usage, the Academy adjourned for two months' recess during the short evenings and hot weather of July and August. At the last meeting in June there was an unusually full attendance, and an interesting session. In announcing the adjournment for recess, Dr. McIlvaine, the President, being in the chair, made a brief address to the Academy pertinent to the occasion.

Hints on Inaugural Theses.—We find the following very suggestive communication from Prof. Thos. D. Mitchell, of the Jefferson Medical College, in a recent number of the *Boston Medical and Surgical Journal*, and we reprint in full. While from the force of circumstances it will, perhaps, be very difficult to lead out medical students, as a class, from the routine of a few hackneyed topics, into the broad expanse of original investigation and experimental research, yet, as the Editor of the *Boston Journal* well remarks, "the hint of Dr. Mitchell is too good to be lost to the profession at large."

A cursory glance at the titles of inaugural theses, as given in the published lists of the graduates in medicine and surgery, would induce the supposition that topics suitable for such productions have well nigh been exhausted. Typhoid fever, pneumonia, dysentery, diphtheria, and other common-place subjects, are so commonly before our eyes, that one might fancy, at least, that none others were worthy the notice of candidates for graduation. The evil under review leads to a result that is perhaps almost unavoidable: and that is, a habit of copying, year after year, with little or no effort at originality. Take typhoid fever, as a sample. The candidate tells just about the same story that has been rehearsed a hundred times before, adding, it may be, a case or two that occurred in the practice of his preceptor, by way of illustration. As a consequence, the professors, into whose hands these essays fall, are not disposed to read them; they feel that an old story merits nothing more than a hasty glance.

Now this practice has grown so absolutely stale as to warrant an effort, at least, to make it obsolete. Nor is there any difficulty in the way of reform, as this brief paper will abundantly show.

Our widely diversified and very extensive country presents articles that have never been properly investigated, and not a few that have scarcely been the subjects of research at all; and it is my purpose to place before the medical student who has industry equal to the task, several items of our great domestic storehouse, the analysis of which will tend not a little to enlarge our curative resources.

The American *Holly*, so abundant in this country, and used by the aborigines as a remedy for periodical fevers, demands a full investigation. A foreign work has told us of the *Ilex opaca* of Great Britain, and its proximate principle, *Ilicene*, as substitutes for Peruvian bark: but the Ilex or Holly of America has had no proper investigation. It is quite easy to obtain the leaves and bark, and to form decoctions and extracts, according to the rules laid down in the books, and then to test their power on the human economy. A proximate principle might also be developed, similar to the Ilicene of the *British Flora Medica.*

The different species of *Salix*, too, call for more thorough investigation. Everywhere we see the *willows*, and most persons are familiar with them. The proximate principle, *Salicine*, is one of the well-known substitutes for the salts of quinine, and the decoctions of the bark have been in use at a period more remote than we would now venture to name.

The very common *Poke-root* (Phytolacca decandra,) belongs to the same category. Something has been done in respect to this article, but it has not yet received the attention it merits.

Our *Persimmon* trees, loaded with fruit, meet the eye in almost every direction, and this is about all that thousands know respecting them. Two or three distinguished men have written on their merits, but to this date no proper analysis has been made, and of course the real value of the article is not known. I incline very strongly to the belief that future researches are destined to give the persimmon a far higher place than it now enjoys among remedial appliances.

It is high time, too, that the real value of the dewberry and blackberry plants was understood. Everywhere employed in domestic practice, why should their therapeutic powers be so imperfectly known that two professors in the same school should, on the same day, pronounce opposite opinions respecting them? Doubtless they are of more value than we are wont to believe.

The *Pœonia* (often called *piney*), the *Apium petroselinum* (garden *parsley*), the familiar *Ruta graveolens* (*Rue*), all have claims that have never been fully met, and yet each has its own peculiar value.

This list could be greatly extended, but we shall content ourselves with alluding to but one other native vegetable, viz., the *Sarracenia Purpurea*, more commonly known as the pitcher plant, from the resemblance of the leaf to a small pitcher; it usually contains one or two ounces of water. My first knowledge of this plant was gained from a perusal of Part 46 of *Braithwaite's Retrospect*, page 95, where its ancient use by the Indian race, as a prophylactic and also as a remedy for small-pox, attracted my attention. This, added to the actual use of the plant in the Toronto Hospital (Canada) in the treatment of variola, induced me to present the subject to my class last winter.

The pitcher plant is very abundant in the United States. Excellent samples were sent to me early last spring from New Jersey, where it flourishes in swampy lands. The plants are now in full vigor in this city, and bear a very pretty flower. A strong decoction of the roots is the preparation employed, now, as in the days of aboriginal simplicity. As the plant is exceedingly abundant, any desirable quantity may be gathered for experimental purposes.

It will occur to the reader that the articles above named (and there are scores besides,) are in our own soil and therefore easy of access, and to be had at little or no expense. Let our candidates for graduation make their selection, and devote a portion of the usual college recess to a careful investigation, and they will be able to present theses that may have some good claim to originality; and the day may yet come when our own country will be able to furnish scores of remedial agents whose actual worth may supplant many articles that are now brought to us from far distant climes.

It is my custom to present this whole subject to my class every winter, but it seemed desirable to call the attention of others, equally interested, to the special merits of the case.

Philadelphia, June 24th, 1863. THOS. D. MITCHELL, M.D.

Garibaldi Probe.—Dr. E. L. Duer, of the Sixteenth U. S. General Hospital at Philadelphia, proposes a very simple substitute for the porcelain-headed probe of M. Nelaton, known by surgeons as the *Garibaldi probe*. He suggests a white or opalescent glass rod, having successfully made use of this for several months. He says in a note to the *Philadelphia Reporter*, "A rod of the requisite thickness and color may be simply and readily prepared by first rounding the end a little, by holding it in the flame of a spirit lamp, and then rasping it off with emory paper."

"*Liability of Druggists.*"—The *American Journal of Pharmacy*, after quoting the case published in the May number of this journal, contributed by Judge Lawrence, of Bellefontaine, remarks: "According to this statement, it is a matter of doubt whether SO_3 or NO_5 was used. In either case the acid would, in weighing out the ingredients, assume the lower stratum. The subsequent reaction, brought on by agitation, would be very much influenced by the nature and strength of the acid used. To produce the effects indicated, either the heat must have been sufficiently great to vaporize the turpentine, so as to form an explosive mixture with the air of the room, or gasses of an explosive nature were eliminated and subsequently ignited. The season of the year would require the front door closed, and under these circumstances a very moderate sudden expansion of the atmosphere of the store would force out the bulk windows easily. The case is worth a chemical inquiry."

Circular No. 6 Once More.—The following note has been received from a correspondent just as we are going to press, and too late to be inserted in the proper department of correspondence.

Dr. Hibberd and Surgeon-General Hammond.—Dr. Hibberd is very indignant, very abusive and very coarse in his article in your last number on the action of the profession in this city in regard to Surgeon-General Hammond's proscription of calomel and tartar emetic. The Doctor tried to be argumentative and genteel in the American Medical Association when this subject was discussed; but fails now in both qualities lamentably. He suffers by it. Moreover, he exhibits his ordinary traits or habits in practice unmistakably. I shall not charge upon the Doctor that he holds or is seeking any job at the hands of the Surgeon-General, for of that I am ignorant; but I will venture to say that it is commonly the talk of him amongst his friends in Richmond, that "He don't give much strong medicine; only gives calomel very rarely and very little at a time; that he gives very little medicine or very small doses," etc. Moreover, that he speaks thus of himself, and his friends merely repeat his own ideas. Every community has its Dr. Hibberd. They must be borne with. The profession in Cincinnati can bear with him. In fact, they did for one winter, and said nothing about it. INTER NOS.

Michigan State University.—At the recent annual meeting of the trustees of this institution, Dr. Tappan was removed from the Presidency and the Professorship of Sacred Rhetoric, and Dr. E. O. Haven elected to fill the vacancy. The election was made *viva voce* and unanimous. It is understood that hereby is removed the noxious influence which has year after year persisted in the effort to foist a chair of Homœopathy on the medical department of this University.

Long Island College Hospital.—This vigorous medical school held its annual commencement on the 2d of July, having sixteen graduates. The President, Dr. Theodore L. Mason, made an introductory address reviewing the history of the school, and conferring the degree of M.D. upon the graduates. Dr. Mitchell administered the Hippocratic oath. The honorary degree of M.D. was conferred on G. Eaton, of the Packer Institute.

Prof. Austin Flint made the address to the graduating class. An address was also made by Hon. Samuel Sloan (President of the Board of Trustees,) in the course of which he alluded to a debt hanging over the College of $25,000, of which he expressed a willingness to subscribe $1,000, or if necessary $2,000, if the debt could be all liquidated. These are the kind of men to be at the head of our public institutions of learning.

Railroad Matters.—See changes in the time-table advertisement. Especially note the connections eastward of the New York Central, connecting Buffalo, Niagara Falls and Albany.

The French Conscription.—The year's conscription of one hundred thousand men, which is just over, shows, it is said, a large increase in France in the number of the sickly and the deformed, of the class who are below even the small statue of the approved conscript.

Induction of Premature Labor.—Professor Giordano tells us that the best method of inducing premature labor is cauterization of the neck of the womb with lunar caustic. This, he says, excels all other methods.—*Amer. Med. Times.*

Vivisection.—The deputation of the Society for the Prevention of Cruelty to Animals, which some time since waited on the Emperor Napoleon to protest against the practice of vivisection, have been rewarded by an ordinance of police, which places a check on this practice. The veterinary and anatomical schools are therefore expected to relinquish it entirely.—*London Lancet.*

Breast-Pin Swallowed by a Child.—In the *Edinburgh Medical Journal,* Thomas Annandale, Esq., F.R.C.S.E., relates the case of a child, aged three years, who swallowed a breast-pin about three inches in length, which was voided in twenty hours afterwards, the child having suffered no inconvenience.

Cinchona in Java.—The Dutch government, having prohibited the culture of opium, has widely favored the production of the cinchona, imposing upon the planters such regulations as are necessary to the preservation of the trees.—*London Lancet.*

The Upas Poison.—There is a statement in the *Abeille Medicale* that a scientific gentleman of Berlin recently took three grains of the upas. He immediately felt an exhilaration of spirits, followed by headache: in half an hour this was succeeded by spasmodic convulsions and other symptoms. On removal to the hospital, an emetic and opiates were administered. He recovered in six days.

Dr. T. Gaillard Thomas has lately been appointed Adjunct Professor of Obstetrics to the College of Physicians and Surgeons of this city. The choice of the Trustees is an exceedingly good one. Dr. Thomas is a gentleman of acknowledged ability in his department, and has long enjoyed the reputation of being a very successful teacher. We learn that Prof. Bedford has resigned the Chair of Midwifery in the University Medical College, which he has filled with so much ability since the first organization of the school. His successor has not been appointed.—*Amer. Med. Times.*

Another Death from Chloroform.—We wonder, as nearly every English journal brings to us the account of still another death from chloroform, how many sacrifices will yet be required to open the eyes of the public there, for of the profession we have no hope, to the facts that chloroform may kill anybody who inhales it, while ether is capable of producing the same anæsthetic effect with only a little more trouble, but with entire safety. The last victim was a distinguished member of our own profession, Mr. F. Wakefield Skey, M.R.C.S., the following account of whose death is taken from the *Lancet* of June 6th:

"The profession to whom he is so deservedly well known will sympathize with Mr. Skey in the severe loss sustained by him in the death of his eldest son, which took place on Friday last under the following melancholy circumstances:—The deceased had long suffered from a severe neuralgic disease, to obtain relief from which he frequently had recourse to chloroform, but with only temporary benefit. More than once he carried the anæsthesia to such an extent as to cause considerable alarm, especially on one occasion, when, acting as house-surgeon to St. Bartholemew's Hospital, he remained so long under the influence of the subtle agent, as to necessitate recourse to galvanism and to artificial respiration. On recovery he assured his anxious and deeply afflicted parents that it was the last time he would use it without advice. The promise he religiously kept until Friday last, when an unusually severe paroxysm came on, and having to meet his father and several friends at dinner, he again had recourse to his old, but on this occasion fatal, remedy. How long he had succumbed to the active agent is not precisely known, but he was found in his chamber, kneeling at a chair, with a handkerchief to his face, which had contained the chloroform. He immediately received every attention, but too late; the vital spark could not be recalled. The deceased, who was only thirty-one, had attained to considerable excellence in music, poetry and painting."—*Boston Med. and Surg. Journal.*

Army Medical Intelligence.

Surgeon D. P. Smith, U.S.V., has returned from leave of absence, and resumed his duties in charge of Fairfax Seminary Hospital, Va.

Leave of absence for thirty days has been granted to Surgeon E. T. Perkins, Seventy-First New York Volunteers.

Surgeon E. D. Daily, U.S.V., and Assistant-Surgeon Andrew H. Smith, U.S.A., have tendered their resignations.

Drs. W. F. Norris, Edward Cowles, and Michael Hillary have been appointed Assistant-Surgeons in the regular army.

Mr. W. M. Giles, of New York, has been appointed Medical Storekeeper, U.S.A.

The General Hospital at Broad and Cherry streets, Philadelphia, has been closed. Surgeon John Neil, U.S.V., lately in charge, has been ordered to Summit House Hospital.

Surgeon John G. F. Holston, U.S.V., has been assigned to duty as Inspector of Hospitals at Memphis, Tenn.

Surgeon J. E. Quidor, U.S.V., to charge of Convalescent Hospital, Young's Point, La.

Assistant-Surgeon C. J. Kipp, U.S.V., to General Hospital, No. 1, Nashville, Tenn.

Surgeon G. R. Weeks, U.S.V., to the McPherson Hospital, 17th Corps, near Vicksburg, Miss.

Surgeon John W. Foye, U.S.V., to Hospital No. 19, Nashville, Tenn.

Surgeon Frederick Seymour, U.S.V., is superintending the erection of a large Field Hospital at Nashville, Tenn.

Surgeon S. D. Carpenter, U.S.V., has been assigned to the Webster Hospital, Memphis, Tenn.

Assistant-Surgeons L. C. Rice and M. K. Moxley, U.S.V., to the Floating Hospital "Nashville," near Vicksburg, Miss.

Surgeon O. M. Bryan has relieved Surgeon John M. McNulty, U.S.V., as Medical Director, Department of New Mexico. Surgeon McNulty is assigned to duty as Medical Inspector of the Department.

Surgeon J. W. Pittinos, U.S.V., has been assigned to Camp Parole, Maryland.

So much of S. O. 264, from the A. G. Office, as dismissed Assistant-Surgeon John A. Meek, Eighty-Ninth Indiana Volunteers, on false charges presented by Colonel C. D. Murray of same regiment, has been revoked, and Assistant-Surgeon Meek is restored to his regiment, provided the vacancy has not been filled.

Leave of absence for twenty days has been granted to Assistant-Surgeon J. J. Conlan, Sixty-First Ohio Volunteers, on Surgeon's certificate of disability; and on the same certificate to Surgeon L. E. Norris, Seventeenth Maine Volunteers, for twenty days.

Assistant-Surgeon H. R. Silliman, U.S.A., to report to Brigadier-General A. Schoepf, at Fort Delaware.

Surgeon W. S. Thompson, U.S.V., has been ordered to report to Col. C. M. Prevost, at Harrisburg, Pa., for duty with the Invalid Corps.

Medical Inspector G. W. Stipp, U.S.A., has been relieved from duty in the Department of the South by Medical Inspector A. C. Hamlin, U.S.A., and has reported for duty to the Secretary of War.

Surgeon Charles Sutherland, U.S.A., now on duty in the Department of the Tennessee, has been ordered to report to Major-General Foster, commanding Department North Carolina, as Medical Director of that Department.

Assistant-Surgeon L. W. Read, U.S.V., to report to Major-General Heintzelman, commanding Department of Washington.

The contract of Acting Assistant-Surgeon Lewis A. Hall, U.S.A., has been annulled for attempting to defraud an enlisted man of money which he borrowed from him.

Surgeon William H. Morton, First Minnesota Volunteers, having tendered his resignation, has been honorably discharged the service of the United States.

Leave of absence for thirty days has been granted to Assistant-Surgeon John G. Perry, Twentieth Massachusetts Volunteers.

Surgeon George Suckley, U.S.V., will report in person for duty to Major-General Schenck, at Baltimore, Md., as soon as his services can be dispensed with in the Army of the Potomac.

The appointment of Sherman Morse, as Assistant-Surgeon, Second New York Cavalry, has been revoked, he having failed to report for duty with his regiment.

Assistant-Surgeon Joseph Swartz, One Hundred and Sixty-Sixth Pennsylvania Volunteers, having been absent from duty for over three months, has been discharged from service on account of physical disability.

The following assignments to duty of Medical Officers have been made:

Surgeon S. D. Carpenter, U.S.V., now on duty at Fort Kearney, Nebraska, and Assistant-Surgeon G. F. French, U.S.V., to report in person to Major-General Grant, commanding Department of the Tennessee, and by letter to Assistant Surgeon-General Wood, at St. Louis, Mo.

Assistant-Surgeon S. E. Fuller, U.S.V., recently appointed, to report in person to Major-General Rosecrans, commanding Department of the Cumberland, and by letter to Assistant Surgeon-General Wood, at St. Louis, Mo.

Assistant-Surgeon W. C. Bennett, U.S.V., recently appointed, to report to Major-General Burnside, commanding Department of the Ohio.

Surgeon Joseph P. Colgan, Fifty-Ninth New York Volunteers, having been absent from duty over three months, has been discharged for physical disability.

Colonel George D. Ruggles, A.D.C., and Assistant Adjutant-General, has been ordered to proceed to New York, and there organize such discharged or disabled soldiers and enlisted men in the hospitals for service in the Invalid Corps, as may meet the requirements of General Orders 105, current series. Assistant-Surgeon R. Bartholow, U.S.A., has been detailed to assist Colonel Ruggles in the above duties.

Assistant-Surgeon Alexander M. Speer, U.S.V., is on duty at Seminary Hospital, Columbus, Ohio.

Surgeon W. S. Forbes, U.S.V., has been assigned to the 13th Army Corps as Medical Director, relieving Surgeon J. G. F. Holston, U.S.V., who has been assigned to duty superintending removal of the wounded from the Yazoo to the hospitals at Memphis, Tenn., etc.

Surgeon S. F. Elliott, U.S.V., has returned to Hilton Head, S. C., from leave of absence.

Special Selections.

Attempt to Restore a Putrefied Body to its Natural Appearance.

Communicated to the *London Lancet*, by BENJAMIN WARD RICHARDSON, Senior Physician to the Royal Infirmary for Diseases of the Chest, London.

On Saturday, 9th instant, (May, 1863,) I conducted an inquiry to ascertain if a human body that had undergone putrefactive change to such a degree that it was unrecognizable, could be so far restored to the appearance of life as to be sworn upon in respect to its identity.

As the inquiry in question, from the circumstances by which it was surrounded, has created great public interest, as it opens a new line of research in regard to a medico-legal question of a very important nature, and as certain imperfect impressions are afloat concerning it, I take the opportunity of laying the exact scientific facts before the profession at the earliest possible moment.

To make the point clear to provincial and foreign brethren, let me state the simple narrative of the facts in the first place. Some weeks ago a woman named Emma Jackson was murdered in St. Giles's by having her throat cut in a house of ill-fame, to which she had retired with a man who had been seen by at least three persons, and whose appearance was clearly defined by them. This man, by some strange and almost inexplicable method, made his escape from the house without being seen to depart, and has not since been detected. Several persons have, however, been suspected, and one or two have been temporarily detained, but on examination they have been discharged.

On Monday, May 4th, a man was dragged dead from the Thames who in many respects seemed to answer to the description given of the assumed murderer. On the following Wednesday, Mr. Humphreys, the coroner for East Middlesex, held an inquest on the body of this man, but decomposition had advanced so far that none of the witnesses could arrive at any conclusion whatever respecting the body; it was, in fact, utterly unrecognizable. This statement having been made in the public papers on Thursday morning, I formed an opinion, derived from some researches on dead tissues, that it might be possible to alter the appearance of the body so much as to enable the witnesses to speak to its identity. In the afternoon of Thursday last I met, accidentally, Dr. Lankester, who had held the inquest over the body of Emma Jackson, and I explained to him my views. He urged me very strongly to communicate with Mr. Humphreys. I did so, and through the kind aid of Dr. Edmunds got an interview with Mr. Humphreys on Friday night. Having given him an outline of the plan I proposed to follow, he deputed me to carry out the attempt, and requested Dr. Edmunds to be present and take part in conducting the suggested process. We were to act at once, as the adjourned inquest was to be held on Saturday.

At half-past ten on Saturday we were taken to the dead man, who was lying in a shell in the dead-house in Darby Street, Tower Hill. He was dressed as he was when taken out of the water. His body generally, with the exception of the hands, was deeply discolored, and the face was so changed that it was quite impossible to form any opinion respecting either its color or feature; it was as black as the face of the darkest negro, and had it not been white when he was taken out of the water I should say that the man would have been returned as a negro. The lips were enormously distended, and the nose was scarcely visible; the cheeks and eyelids were also greatly distended. In fact, the putrefactive changes were so advanced that it required some little determination to proceed. Following, nevertheless, the course I had marked out, we immersed the body in water, and then added to the water twenty pounds of common salt; we also added gradually, in the course of the operation, one pint of common hydrochloric acid; and the body was allowed to remain under this solution for two hours. The object of this part of the process was to reduce the swelling of the features by exosmosis. The shell, being water tight, answered as a bath.

Meanwhile we charged a pail of water with fresh chlorine, and then, lifting the face out of the water in the shell, treated it with the chlorine water. I also directed a stream of chlorine gas for some time upon the face. The object of this part of the process was to restore the white color.

A little before one o'clock both of the intentions we had in view were realized to a considerable degree. The tumefaction was relieved; and the face, from the deepest black, had become of the cast of light clay, common wood-ash, or the darker sort of straw-paper. When the chlorine in vapor was passing over the face the skin approached to white, but as soon as it was withdrawn the change to clay-like hue returned. So much was now accomplished that we were able to form a fair estimate of the man. We found that he was evidently a young man, not more, probably than twenty-one years of age; he had a short feeble moustache; his lower lip had a short soft beard that had not been shaven, and his whiskers corresponded; his face was naturally round and full, and indeed his body generally was well nourished.

At one o'clock we left, and returned at two. We had arranged that a stream of chlorine should continue to play over the face in our absence, but, as we had no one to leave in charge, the gas had become exhausted, and the face was a little darker when we returned.

Pursuing still the course I had pre-arranged, we opened the body. We found the viscera but little decomposed, and natural; the heart was empty and flaccid; the lungs free from congestion. We fixed a large tube in the aorta, through the left ventricle; and Dr. Edmunds tied the aorta in the thorax, so as to prevent any passage of fluid to the lower part of the body, and to the abdominal viscera. Then we injected a solution, consisting of chlorine water, chloride of zinc, and a little sesquichloride of iron. The object in this instance was to impregnate the tissues from within with the discolorizing agent, and to reduce the tumefaction. On forcing the injection, we found that great escape took place through the vessels that had been divided in opening the thorax. We therefore withdrew the tube from the aorta, and as the face was the part chiefly requiring attention, Dr. Edmunds laid bare the common carotid on the right side, and a small nozzle from the syringe was introduced into that vessel and tied. It must be understood that much care was required in forcing the injection through structures so decomposed and yielding, and that we dare not push this part of the operation too far. Had we used much force we should have produced extensive infiltration through the broken capillaries, and have destroyed the facial structures altogether. So soon, therefore, as the face was subjected to slight tension the injection process was stopped. The time had now approached for the sitting of the jury, at half-past four P. M. We allowed all the water to drain away, drenched the body with pure water, and left it with the face covered with a piece of thick cloth, on which was poured a little hydrochloric acid and methylated alcohol. The face at this time was of a clayey color, and a little more full than natural; and although we felt that we had not brought it up to its perfect natural appearance, we believed that it might be recognizable by any one who had seen it during life, and especially that it was a face which a witness could swear was not that of any particular person whom he remembered, if there were not strong natural resemblances between the two.

The result indicated that we had effected even more than we had anticipated, and that, if we had not succeeded, to the perfection we could have wished, we had fulfilled the practical part of our mission and all that was demanded of us; for the three witnesses who were there either to confirm or disprove the hypothesis that the man before them was the man last seen with the murdered woman, each and all swore without hesitation, on their second view of the unknown man, that he was *not* the assumed murderer.

Margaret Curley, of 4 George Street, St. Giles's, swore that she had examined the deceased since the operation had been performed, but that she did not recognize him as the person she had seen before, nor as the person suspected; Charles Ansley, of 20 Pater Street, bore the same testimony; and H. Stoke, the shoe-man, swore definitely that, from his inspection of the deceased since the operation, he was sure that he was not the man whom he had seen with Emma Jackson. The Coroner, in summing up, observed that the experiments made having enabled the witnesses to swear that the deceased man was not the man accused of the murder, they had fulfilled their purpose, and the jury returned a verdict in accordance with the evidence.

Reflections and Suggestions.—The fact that in a case so extreme as the one named, science has come in to render essential aid to justice, affords, I hope, subject for thought and renewed effort in the same direction. I am far from considering that we ought to stop where we have thus begun. I look upon this case, in fact, as a mere first and experimental trial, which followed up will lead to great perfection in one department of medical jurisprudence; and I feel, consequently, that I can not conclude this paper better than by pointing out what improvements in the process have been suggested to me by the experience detailed above.

1. In respect to time. On another occasion I would ask to be allowed at least twenty-four hours for the performance of the process. The period of six hours was insufficient for the full development of the required changes.

2. I should proceed by stripping the subject of all apparel.

3. After this the subject should be placed in a water-tight shell, in which a large tap for escape of water should be inserted, and the body should be thoroughly washed with water.

4. After the washing the body should be covered with water, and held beneath it by a few cross bars of wood. Then the lid of the shell should be temporarily but effectually closed down, and two openings should be made into the lid; through one of these openings the free end of a tube, connected with a chlorine flask, should be passed beneath the surface of the water; while from the other opening should come another tube, the free end of which should turn over into a glass globe of water. These preliminaries arranged, fresh chlorine should be driven in until the water within is saturated by it, the fact of saturation being determined by the passage of chlorine through the escape-tube. When the water around the body should thus become charged with chlorine, the openings in the lid of the shell should be closed, and the whole should be left undisturbed for twelve hours.

5. On opening the lid after the interval of time named, common salt should be added to the water, until the hydrometer should stand several degrees above the specific gravity of the blood: the specific gravity of 1100 would answer for the solution. In this solution the body should remain immersed for twelve hours; the water should then be drawn off and the body examined.

[If there were no deep decomposition and discoloration, the body, I believe, would now be ready for identification; but if the putrefaction were very deeply seated, it would be requisite to proceed further.]

6. If necessary, open the trunk of the body at this point, and make any post-mortem observations that may be required. The head should not be opened at this stage.

7. After the post-mortem examination, in order to restore a more natural expression to the face, solutions should be injected into the external carotid of each side. The form of solutions I should suggest in another case would be: (*a*) Water saturated with chlorine, and charged, in addition, with tincture of the sesquichloride of iron in the proportion of two fluid drachms to the pint. (*b*.) Common fresh milk saturated with common salt.

Of injection *a*, I would recommend that from two to three ounces should be slowly injected on each side, to be followed, without removing the nozzle of the syringe from the vessel, by so much of solution *b* as should cause the slightest possible tension on the tissues of the face.

Lastly, if it were requisite to retain the body for some time, it would be advisable to cover it with wood spirit, containing one drachm to the gallon of the tincture of sesquichloride of iron, and to exclude it *from the air.*

In offering these suggestions, I beg that they may be accepted as open to revision: the principle recognized, the details are certain, under experiment, to be simplified and improved.

In conclusion, I have to offer my warmest thanks to Dr. Edmunds for the energetic, friendly, and able part which he took in the very interesting inquiry to which I have called attention. His exertions contributed in a most important manner to the results obtained.

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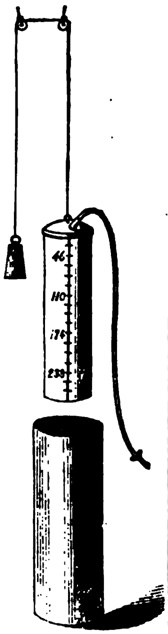
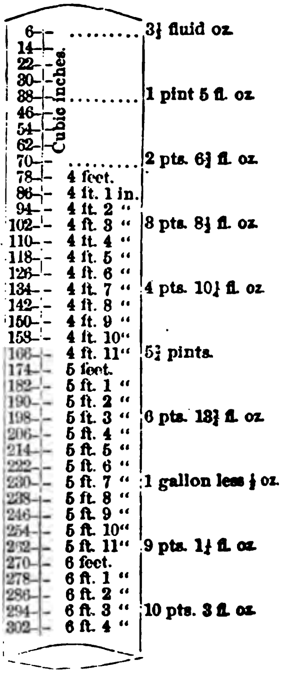
A Cheap Spirometer.

By W. E. Bowman, M.D., Editor of the *Canada Lancet.*

A cheap spirometer may readily be made from two tin vessels similar in shape to the ones figured in the accompanying engraving; the one should be about twenty inches long and six inches in diameter, and the other eighteen inches long and five inches in diameter. The latter may be graduated into spaces of eight cubic inches by means of our ordinary gallon measure, it being the old wine measure of Great Britain, and the one that is adopted by the U. S. Pharmacopœia; it consists, as every body knows, of eight pints of sixteen ounces each, the ounce measuring 1·8 cubic inches.

Having placed the smaller vessel perfectly upright, measure into it a gallon of water less half an ounce, and with a rule ascertain the precise distance from the surface of the liquid to the brim of the vessel, then placing this measure outside of the tin, mark the height of the water as 230 c. in. In a similar manner with half a gallon and 10½ fluid ounces, mark 134 c. in.





Next divide the space between these two points into twelve equal parts, which will be measures of eight c. in. each, and with the compasses continue the graduation upwards and downwards, placing the figures on the inverted vessel as here shown. If its diameter be every where alike, the measure must be correct; its accuracy, however, may be readily tested by the annexed subdivisions of the same measure. The pulleys and counterpoise may now be adjusted to the graduated tin.

Next fill the larger vessel with water so that the smaller may be just covered when inserted as low as possible into it, and mark the height of the water on the inside of the larger tin. Then raise the small one gently until the 174 c. in. line appears even with the surface of the water, and make a second mark of its level. Finally, put the third graduation in the large tube when the smaller is raised completely out of it.

Lastly, affix two or three feet of flexible tubing and a mouthpiece to the top of the small tin, and the spirometer will be ready for use.

The gradation inside of the larger vessel is to detect and obviate any difference in the level of the water within and outside of the rising vessel, which after receiving the breath should be depressed until the water is at its proper level, the tube being closed by the fingers during the adjustment and reading off.

With this scale as a guide, the York Glass Company of England has made me a beautiful spirometer of this form entirely of glass, and correctly graduated into cubic inches. It differs somewhat from this one in having a perforated glass stopper in the centre, to which the silk-covered tubing is attached; and also in having two cords, one each side of the stopper, and four pulleys, which prevent it from turning. Thus arranged, and mounted on handsome brackets, apart from its usefulness in ascertaining the presence and progress of phthisis, it forms an elegant addition to a surgery.

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Physiology of Tea-Drinking.

The reduction of the duty on tea involves not only a financial experiment, but a physiological one, of interest to all who study medical and social science.

An enthusiastic historian of the stimulants we use might find plausible ground for saying that the introduction of tea into the western world is the most revolutionary innovation in the sphere of diet which history records, and for tracing to its influence on our national character much of the mental and physical activity of this nineteenth century. We must avoid enthusiasm, and try to say a few sober words on this subject.

The Chancellor of the Exchequer anticipates an additional consumption of tea to the figure of 6,000,000 pounds (?) What will be our experience of English character and life under this increased tea-drinking? What will be the equivalent physiological results of these six millions of pounds of tea? What will be their effect on English temper and tissue?

That tea has an influence over the tissues of the body is now among the things admitted in physiology. This influence is of a conservative nature, and its value to the poor can scarcely be overrated. To them, tea is virtually tissue, and makes a supply of food, that would otherwise be inadequate to maintain the weight of the body, sufficient for that purpose. Doubtless an unlimited supply of food capable of replacing any amount of effete tissue would be preferable to a substance which simply goes to prevent tissue from becoming effete; but this is impracticable—the unlimited supply of nitrogenous food being a thing that as yet neither Providence nor politicians have given to us. Doubtless, too, alcohol has, in common with tea and other substances, this power of retarding the waste of the tissues of the body; but probably it acts differently, and certainly it is open to strong objections which can not be made against tea. This preservative power of tea over the tissues has not hitherto been explained. Perhaps it may not be altogether unconnected with another influence of tea which we proceed to notice—namely, an influence over the temper, or rather the mood, or, speaking physically after our fashion, over the nerves. Nothing affects the wear of tissue more than mood; and tea has a strange influence over mood—a strange power of changing the look of things, and changing it for the better: so that we can believe, and hope, and do, under the influence of tea, what we should otherwise give up in discouragement and despair—feelings under the influence of which tissues wear rapidly. In the language of the poor, who in London, we are told, spend an eighth of their income in buying tea, it produces a feeling of comfort. Neither the philosopher nor the philanthropist will despise this property of tea, this power of conferring comfort or removing *ennui*, of promoting those happier feelings of our nature under which we can do most and bear most. There is no denying the considerable dependence of our moods and frames upon substances; and as moods are as important as muscles, as they effect as largely a man's ability for the great ends of life, we can not regard the cheapening of such substances, when devoid of noxious qualities, as other than a most important benefit to the poor and a most interesting experiment for medical observers to watch.

Tea is indeed a great fact in our present mode of life. It has been the making of an additional meal among us since the "good old days" when people lived on three meals a day. Justice has scarcely been done to the magnitude of the change which has happened since the time when gentlemen—aye, and ladies too—took beer to their early breakfast, when they dined at eleven, supped between five and six, and went to bed at ten. Tea and coffee have been the principal causes of this revolution.

One of the most important results of the use of tea is the prolongation of the social evening. At the time of evening leisure it gives the feeling of morning lightsomeness and freshness. It has something like the effect of sleep upon us. It removes that heaviness which follows the principal meal and would take us to bed "at ten." It postpones the hour of sleep. As a consequence of the postponement of the hour of sleep, follows inevitably the postponement of the hour of waking. Early rising has probably no such enemy as tea. There are not a few people who breakfast when their fathers used to think of dinner, who dine when their fathers supped, and who take their enlivening cup at the hour when their fathers were getting stupid and making ready for bed. No doubt there is some evil in all this, but there is more good. The mere alteration in the hours of sleep, or even the taking of an additional hour for this purpose, are not necessary evils. The question of evil or good turns upon the character of our waking hours, and we believe we are not saying too much for our present life when we say that life never was so active and so fruitful of good results as now.

Of course the increased consumption of tea which is to happen may involve some physiological consequences of a disagreeable nature ; but not many. For the class to whom the cheapening of tea will be the greatest temptation are not troubled with "nerves." They have so much hard work to do, and so little of luxury in their lot, that the addition of a little good tea to their daily fare can only be a great comfort and a great boon, for which they will bless the name of Mr. Gladstone.—*London Lancet.*

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Influence of Musical and other Sounds upon the Larynx, as seen by the aid of the Laryngoscope.

This formed the subject of an interesting lecture delivered before the Musical Society by Dr. Geo. D. Gibb. The first published notice of the instrument was by Mr. Liston, the celebrated surgeon, in his work on Surgery ; but the first person who employed it to study the mechanism of the voice was Professor Garcia, whose researches were brought before the Royal Society in 1855, and published in their "Proceedings." His observations were founded upon the examination of his own larynx during the act of singing. Subsequently, in 1857, Dr. Turck, of Vienna, employed the instrument medically ; he was followed by Czermak, Battaille, Merkel, and many others. The lecturer observed that sufficient credit had not been given to Garcia for what he had done, as his researches, although much extended, had not been surpassed, and has been palmed off as their own by some subsequent observers. His great knowledge of music has given to his experiments a value of the highest character, which can not be too much appreciated. In 1860 Dr. Gibb commenced his researches with the instrument, as an agent to study and understand the hidden diseases of both the larynx and windpipe, and the mechanism of sound whether musical or otherwise. The results of his labors, together with those of Garcia and Battaille, were embodied in his lecture.

The mechanism of the laryngoscope was described and illustrated by a number of reflecting and laryngeal mirrors, manufactured by Weiss and Son. Their mode of application was shown, whether in looking at the interior of the larynx downwards from the back of the throat, or in seeing the back of the nose from below upwards. The lecturer then proceeded to describe briefly the parts of the larynx seen on looking into it with the little mirror ; and this was lucidly done by the aid of a series of large colored diagrams representing the various cartilages, ligaments, muscles, and membranes entering into its formation. At the bottom of the larynx (which is the prominent cartilaginous box felt in the upper part of the neck externally) is seen an antero-posterior fissure, extremely movable, assuming at times a lozenge, elliptic, or triangular shape, of which the brilliant pearly borders palpitate with surprising rapidity. This is the glottis formed by the true vocal ligaments, or, as they are now generally called, the vocal cords. The action of these cords alone gave rise to sound, whether in speaking or singing. The three sets of ligaments attached to the pair of little pitcher-shaped cartilages, called the arytenoid, the lecturer compared to three pairs of reins in tandem driving, which acted almost simultaneously during certain acts, such as coughing and swallowing.

The subject of his discourse Dr. Gibb divided into the silent movements of the larynx, or non-phonatic, and the phonatic, wherein sounds were produced, whether in speaking or singing, either during inspiration or expiration.

There are two manifestations possessed by the ordinary expiratory voice, which have been long known under the names of chest and falsetto register. The head voice, so well known to vocalists, Dr. Gibb was disposed to reject in his experiments equally with Battaille as opposed to anatomy and physiology. Its range, laryngoscopically, so to speak, is shown by Garcia in his writings.

A series of experiments were now detailed illustrating the determination of the chest register. They consisted of the production of certain sounds of the diatonic scale, and the behavior of the glottis was carefully noticed and pointed out in the diagrams. The mechanism of the elevation and lowering of sound was next considered, and equally illustrated by extremely interesting experiments and diagrams. In the chest register, the vocal cords vibrate throughout their whole extent—namely, in their subglottic region, their ventricular region, and on their free border; longitudinal tension is generally stronger than in the falsetto register; and the vibrations become more rapid and ample in proportion as the sound becomes more acute; the reverse takes place when the sound becomes more grave—the opening of the glottis is rectilinear.

Experiments were related wherein the proceeding was taken advantage of to alternate the production of the same sound in the chest voice and falsetto voice by means of an interrupted current of air—to study the inherent glottic modifications of the falsetto register in general. The phenomena resulting from these, as seen in the laryngeal mirror, were described, and are full of interest to the vocalist. The results went to show that in the falsetto register the vocal cords vibrate only on their free border and their ventricular region. The subglottic region, which plays such an important part in the chest register, here ceases to take any direct part in the generation of sound. Longitudinal tension is feebler than in the chest register, and the vibrations become less ample and more rapid according as the sound becomes more acute; but when more grave the reverse takes place. The opening of the glottis is more or less elliptic in accordance with the nature of the voice and the size and density of the vocal cords themselves.

The lecturer proceeded to notice some of the other phenomena of the voice, including that of inspiration ; the last very difficult to investigate from the pain produced in its manifestation. It is only by the aid of the falsetto register that the inspiratory notes can be obtained, and the glottis is more open than in the expiratory sounds of this register. In the general summary of laryngoscopic observation, besides the phenomena peculiar to each register, it was shown that there were some common to both ; thus the generation of vocal sound never occurs without the vocal cords being stretched and vibrating wholly or in part. The closure of the glottis behind occurs up to certain tonal limits, and is indispensable to the brilliancy and elevation of sound. The *false* vocal cords take no part whatever in the generation of sound.

Professor Garcia had previously pointed out that the formation of sounds in either register was produced, not from the actual vibrations of the whole or part of the vocal cords, but from the successive explosions which they allowed. Dr. Gibb said his lecture would have been incomplete without a few words upon the formation of the voice. The vocal cords at the bottom of the larynx exclusively gave rise to the voice, whatever may be its register or intensity, because the laryngoscope has shown that they alone vibrate in that situation. To one of the Fellows of the Musical Society, Professor Garcia, we are indebted for what the lecturer considered as the true and correct explanation of the formation of the voice. It originated from the compression and expansion of the air, which gave rise to successive and regular explosions in passing through the glottis. The ligaments of the glottis or vocal cords close the passage, and offer a resistance to the passage of air. As soon as the air has accumulated sufficiently, it parts these folds and produces an explosion. But at the same instant, by virtue of their elasticity, and the pressure from below being relieved, they meet again to give rise to a fresh explosion. A series of these compressions and expansions, or of explosions, occasioned by the expansive force of the air and the reaction of the glottis, produces the voice.

The sounds " ha ! ha ! ha !" in laughing, offer a familiar illustration of rapid explosions occurring in succession by the opening and closing of the glottis, and form a striking picture in the laryngeal mirror. The quality of the voice is now proved to depend upon simple changes in the mechanism of the larynx. The waves of sound generated by the larynx in the column of air contained in the trachea, produce, in a word, vibration of the cords. If they can not be excited, then sounds are extinguished, and the result is what the lecturer saw instances of almost every other day—namely, aphonia, or loss of voice.

Such were the results obtained by the aid of the laryngoscope. They were but an installment of what was promised by future observation and experiment in the hands of those members of the lyric art who would devote their energies to the task. From what had been described, Dr. Gibb remarked, it would be readily comprehended that the slightest deviation from the healthy standard would materially affect intonation, more especially anything that influenced the *tension* of the vocal cords. Vocal tension, so to speak, must be uniform and equal on both sides—that is, both cords must be equally and simultaneously influenced by the little cartilages called the arytenoid, which govern and direct the three pairs of reins noticed in the early part of this lecture.

Setting aside altogether in his lecture the notice of any morbid phenomena which affected the voice, the lecturer requested permission merely to refer to the cause of failure, partial or complete, of a portion of the notes of the diatonic scale—whether the middle, the higher or the lower, or the junction of either—as revealed by the laryngoscope. This, he said, would be found to depend chiefly upon inequality in the power of tension of the two vocal cords; that is to say, whilst one cord would become stretched to its required length during the utterance of the middle or higher notes, the other did not become so in an equal ratio—hence the parallelism and symmetry so essential to perfect harmony in singing became imperfect. Dr. Gibb claimed to himself the credit of being the first to point out this important fact. He then referred to the condition of the epiglottis, and denied that the loosening of this cartilage could be accomplished at the will of the singer, as was supposed by some. The reason of this was given, and measures to remedy it referred to.

In conclusion, Dr. Gibb stated, that without any pretensions at all as a vocalist, he had performed various experiments with the view of understanding the cause of defective voice; but the interest of the subject grew upon him, and induced him to go more fully into it. Some of the results of his labors he had ventured to bring before them.

An interesting discussion followed, in which Professor Garcia, Mr. Charles Salaman, Mr. Tracy Osborn, the chairman, Mr. Godfroi, and Dr. Richardson, took part. The question of the mental faculties in relation to the physical invocalism, formed the main topic of the debate.—*London Lancet.*

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A Formidable Operation.—According to the *Gazette Medicale de Strasbourg,* Dr. Kœberle has just performed one of the most extraordinary operations ever undertaken in surgery. While removing through an opening made in the abdomen a fibrous tumor of the uterus of a considerable size, he determined, in consequence of the changes which the uterus and ovaries had undergone, to extirpate the whole of these organs, leaving only the vaginal portion of the cervix uteri. The operation was performed on April 20, and the patient suffered from no untoward consequence, being five weeks after the operation quite convalescent.—*London Lancet.*

Editorial Abstracts and Selections.

1. *Treatment for the Peyerian Lesion.*—Dr. E. R. Peaslee remarked that if it be true, as Dr. Lee has suggested, that arsenious acid modified the progress of typhoid fever, he believed it exerts this influence not in the manner specified by him, but because, like quinine, it is in some way an antidote to the fever poison itself. In regard to the general treatment of continued fevers, Dr. P. said that his ideas might be very briefly formularized. But when we come to actual cases, we must constantly modify it to suit the particular case under consideration. The following general propositions would be the basis of his practice:—

1st. Continued fever is a self-limited disease, its duration being incapable of any essential abridgement by treatment.

2d. It is due to the presence of a poison which must be neutralized or eliminated before recovery can occur.

3d. Therefore the treatment should consist:—

A. In giving the patient the best chance to eliminate this poison by removing all obstacles to this process, by receiving perfect ventilation of the apartment, cleanliness of the same, and of the person of the patient, by quiet of body and mind, a comfortable temperature, and by proper diet.

B. Administer an antidote to the poison, if any is known; and Dr. P. believes that quinine and the various preparations of cinchona bark act partly in this way.

C. Prescribe such other remedies as will aid the action of the agents just mentioned, as diaphoretics, diuretics, laxatives, soporifics, and stimulants, if required, and as required.

But when we come to treat given cases, we will find the indications under the last head to vary exceedingly, though the points under the other two are never to be disregarded.

Dr. P. has had cases of typhoid fever in which he did not resort to medication at all, except as indicated under the first two heads above, *i.e.*, hygienic management, and some preparation of cinchona. All have seen those cases of "walking typhoid," as they are sometimes called; and in most of these no other treatment is required than just mentioned. In them, also, only mischief results from active medication of any kind.

In regard to the use of stimulants in continued fever, (as that is the point now under consideration,) Dr. P. remarked that he should be influenced by the condition of each particular case. In some cases no stimulant is required during the whole course of the disease, while in others stimulation is demanded from its very outset. In military practice we very often see cases in which fever ensues after an exhausting march, requiring stimulants from their first development. How, then, are we to decide whether stimulation is required in any particular case? Those who have had extensive experience easily decide this point to their own satisfaction. But nothing has as yet been said this evening which would enable a young practitioner to settle this question. Dr. P. would say, then, that stimulation is required in all cases in which subsultus is present; but we desire to anticipate this symptom, if possible. Further, then, Dr. P. should say, stimulants are indicated in cases in which debility is the leading symptom, as shown by the enfeebled and often shrill voice, by marked inability to move if roused; where there is duskiness of the surface, independent of deep pulmonary complications; and especially by a small and feeble and not very frequent pulse. If with these symptoms we give the stimulant while the tongue is still moist and not much darkened on its dorsum, so much the better; for if we delay, it will soon be black and dry, and perhaps cracked, and then stimulation even may be of no avail. These, then, would be to Dr. P. the symptoms demanding the use of stimulants. The next question is—what stimulant shall be selected, and how much shall be given? Dr. P. always has preferred the best brandy, if procurable; if not, then Bourbon whiskey. Some patients, however, have a great aversion to any alcoholic stimulant except wine, in which case champagne is usually very grateful, and to be preferred, though the genuine port is valuable also.

In regard to the amount of stimulant required, Dr. P. thought the effect on the pulse is the best criterion. If that becomes fuller without being increased much above the normal frequency, while the skin also remains moist, and the tongue is not much drier, and especially if quietude and even sleep is induced, the stimulant cannot fail of benefiting the patient; we must then remain and observe the effects of the stimulant, or appoint a competent assistant to do this; and if so, we will find that while a drachm of brandy once in one or two hours will be just enough in some cases, an ounce every hour will be too little in others.

In regard to the danger of excessive stimulating treatment in continued fevers, Dr. P. held a very decided opinion. Stimulants are quite too powerful agents to be used otherwise than cautiously. He remembered an illustrative anecdote of the late Dr. Nathan Smith, founder of the Medical Department of Yale College. Dr. Smith was called a long distance to visit a case of typhoid fever in consultation with two attending physicians, the patient presenting certain anomalous symptoms which gave the latter gentleman great anxiety. After an examination of the case, Dr. Smith told the physicians that he would watch with the patient until morning, when he would meet them again. On returning, they were quite astonished to witness the patient's amendment, which Dr. Smith explained by the following remark: "I found your patient drunk; he is now sober, and if you keep him so, you will have very little more to do for him, but to let him get well."

Dr. P. had not seldom seen delirium and dryness of tongue with irritation of stomach, produced by too free a use of stimulants, and had no doubt that a persistence in such a use of them might have proved fatal.

Reference was made to Dr. Finnell's statement, where that gentleman had seen symptoms like those of delirium tremens occur during the convalescence of a patient to whom stimulants had been freely administered. Dr. P. had no doubt such symptoms might be thus produced. If they might occur after a debauch of two or three days in a strong man in health, surely they might in one debilitated by a typhus or typhoid, though a less amount were taken in the aggregate.

The discussion has been confined principally to the use of stimulants in continued fevers, but Dr. P. remarked, they must be constantly "*backed up*" by appropriate nutriments, either separately or in combination with them. In the latter category he mentioned milk punch, egg-nogg, and wine whey, The best article of all, he thinks, is beef tea, made according to Liebig's formula; next, broths of various kinds, and if there be diarrhœa, milk porridge. Gruel made of Indian meal he thought almost always does decided harm by fermentation in the alimentary canal, and, in fact, he regards it as a general preparation, nourishment perhaps fit for swine,—not for the human organism.

Dr. P. would give cathartics in continued fever either at their outset or during their course, if required to improve the condition of the alimentary canal in reference to digestion, or absorption of aliment, but for no other object. He would, however, remark on these and other classes of remedies, when they came under consideration in their time.

Dr. Benjamin Drake remarked that he listened to the discussion with much satisfaction, and at that late hour would claim the attention of the Society but for a few moments. He was surprised that among the stimulants recommended, but little mention of champaigne wine had been made. In his perhaps limited experience, it had proved of very great value, combining, in addition to its alcoholic properties, all the advantages of carbonic acid gas, and the nutritive constituents of saccharine material. It would seem to be peculiarly appropriate. Besides, it is in most cases peculiarly acceptable to the patient, and whenever it can be procured, it is not only efficient, but very desirable. —*American Medical Times.*

2. *Trephining in Cases of Fracture of the Spine.*—In an appendix to my work on the Central Nervous System, I have tried to prove that in cases of fracture of the spine trephining and other operations for the removal of pieces of bone pressing upon the spinal cord might be employed with great benefit to many patients. This view is based upon many experiments I have made on animals, and on sixteen or seventeen cases in which the operation has been performed on man.

A paper recently published in the United States (*Amer. Med. Times*) by Dr. H. A. Potter, gives additional facts on that subject, which I think deserve to be mentioned. The paper is entitled "Operation for Compression of the Spinal Cord." Two new cases are reported by the author, who had already published one twenty years ago. (*N. Y. Journ. of Med.*) One of the new cases is that of a Mr. S——, who had a fracture of the vertebræ in the inferior cervical region. The patient was unable to move the body or the extremities, except the hands. Sensation was as imperfect as motion. It was decided to operate. The spinous process of the sixth cervical vertebræ was found fractured and displaced, and the arch of the fifth crushed in upon the spinal cord, nearly separating it longitudinally. All that portion comprised in the lamina and spinous process of the fifth and the spinous process of the sixth cervical vertebræ was removed on the 9th of October, 1859. A few months after, the wound was nearly healed, and the patient, who was as comfortable as could be expected, could sit in an easy-chair, could readily move his head, and could converse as freely as any one. He had, however, gained nothing as regards sensation and motion, except that he could use his left hand a little more freely than before. In November, 1862, the condition of the patient remaining the same, Dr. Potter operated a second time, and removed parts of the fourth, sixth, and seventh vertebræ. The cord had not united; it was much flattened and thinned. Two months after it was found that no benefit had been derived from the second operation.

In the second new case mentioned by Dr. Potter the posterior portions of the three inferior cervical vertebræ were removed. The patient died on the fourth day, and the autopsy showed a fracture of the left parietal and occipital bones, and a large clot of blood round the medulla oblongata.

To those medical men who know that death is almost certain in cases of fracture of the spine in the cervical region, it will be apparent that the operation in the first of these two cases saved the life of the patient.

If we add these two cases to those analyzed in my work, we find that out of eighteen or nineteen cases in which the operation of trephining or removal of pieces of bone after a fracture of the spine, the life of four or five patients has been saved by the operation—*i. e.*, about twenty-five per cent. This great percentage of persistence of life, compared with the percentage where no operation has been performed (perhaps less than one per cent.), shows clearly the importance of such surgical interference in cases of fracture of the spine in the cervical or the upper dorsal region.

I have been accused of omitting "to inform (my readers) how the patient, thus all but completely decollated—the muscles of the neck extensively cut, the bodies broken across, and the ligaments between them ruptured—should be able to hold up his head, or prevent its rolling to and fro so as to crush the cord." It seems to me that in my work I have given reasons enough to show, and facts enough to prove, 1st, that the laying bare of the spinal cord is not a dangerous operation; 2nd, that death after a fracture of the spine being usually due to the effects of a pressure upon, or of some irritation of, the spinal cord, it is of the utmost importance to remove the pressure and to diminish the causes of irritation; 3rd, that reunion may take place after a wound of the spinal cord; 4th, that the removed parts of the spine may be replaced by new bone; 5th, that no patient seems to have derived any harm from the operation, and that a great many have derived from it either a temporary or a permanent benefit.

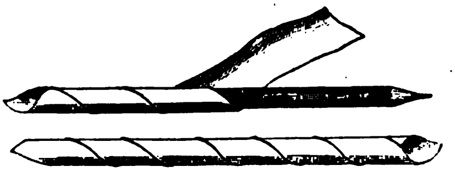
As regards my "omission" to inform your readers how the patient could hold up his head, I never dreamt, I confess, that any medical man could possibly ask such a question, and I still think it is at least useless to give it an answer.

I will only say one more word: Here is an operation recommended by men who are not physicians or vivisectionists like me, but surgeons of the greatest eminence, such as Louis, Henry Cline, Tyrrell, Chelius, Mr. J. F. South, Sir Astley Cooper, and many others—an operation which has been often performed, with a temporary or a permanent success, but which is, however, neglected by most surgeons and proscribed by some, who criticize it theoretically. Is it not a sad spectacle that there is such a neglect and such a criticism when so much is at stake as the life of many men every year? Sir Astley Cooper said, "The operation is laudable and not severe; nor does it increase the danger of the patient. If we could but save one life in a hundred, we would deserve well of mankind." To this I will only add, that the proportion of lives saved is now, not "one in a hundred," but from twenty to twenty-five in a hundred.—E. BROWN-SEQUARD in *London Lancet.*

3. *Medicated Cigarettes.*—Cigarettes may be made of almost any variety of thick paper, but that kind should be selected that on burning yields a smoke most easily inhaled. I have always employed the heavy paper used for copy-book covers, (olive pressings); thick blotting paper, however, makes a good cigarette, but the regular filtering paper does not answer, as its smoke is dense and suffocating.

First, cut the paper into strips about seven inches long and an inch and a quarter wide, and next ascertain how much fluid it requires to saturate 25 of these pieces. This is readily done by soaking them in an exactly measured ounce of water, when on withdrawal it will be found that about five fluid drachms of the liquid have been imbibed. This will give the key to the strength you are to make the solutions.

Next saturate the slips with the remedy, and when nearly dry gum or paste one border of each, and roll it around a pencil as shown in following wood cut, afterwards withdraw the pencil, and the cigarette is made.



Arsenical Cigarettes.—Boil 25 grains of arsenious acid, (the lump broken up, is purest.) in a Florence flask with four ounces of water, down to the quantity required to saturate 100 slips of the paper previous to rolling. They will then contain a quarter of a grain each. If you have not the usual apparatus, hang the flask above some live coals by means of a wire.

Mercurial Cigarrettes.—Dissolve three drachms of red precipitate, in three drachms of nitric acid, and add enough water to make up the quantity requisite to saturate 100 slips of paper. They will contain about three grains of the nitrate of mercury.

Nitre Cigarrettes—Dip the paper in a saturated solution of the nitrate of potash, before rolling.

Balsamic Cigarettes are made by giving the dried nitre cigarrettes a coating of tincture of benzoin.

In the *British Medical Journal,* Dr. Nevins, of the Royal Infirmary School of Medicine, Liverpool, speaks highly of these cigarettes in a number of cases.

Aphonia.—A patient who could not speak above a whisper for over a year, probably due to a thickened condition of the chordæ vocales, as she had no pain or constitutional symptoms, used the mercurial cigarrettes for a month, and perfectly recovered.

Offensive Discharges from the Nostrils—With a sense of uneasiness in the frontal sinuses, was quite cured in about a month with the mercurial cigarrettes. The patient held his nose after taking a mouthful of the smoke, and then forced it into his nostrils in the manner practiced by accomplished smokers.

Polypus in the Nose.—A patient who had been twice operated upon for polypus, is now able to keep the disposition to form fresh polypi in check, by smoking the mercurial cigarette in the same manner, when he feels that uneasiness which warns him of the danger of its recurrence.

Deafness.—When dependent upon an obstructed Eustachian tube, he finds the nitre cigarettes, made with brown paper, most successful, and that the smoke, forced into the tympanum from the throat, gradually restores the sense of hearing. The circumstance which first led him to adopt this method, was hearing a deaf person on one occasion remark, that when he was sneezing the day before, he heard perfectly; the violent effort appeared for the moment to have dilated the Eustachian tube, and hearing was the result. He says, that in a deafness of seven years standing, he had benefited a patient more by this treatment than by any other.

Phthisis.—Trousseau long ago recommended a puff or two of an arsenical cigarette twice or three times a day in phthisis.

When the attention of the profession has been duly aroused to this subject, there will doubtless be found many other affections in which medicated cigarettes may be advantageously employed, as in syphilitic ulceration of the throat, ozæna, offensive breath, obstruction of the lachrymal duct, diphtheria, etc., etc.—*W. E. Bowman, M.D., Editor of the Can. Lancet.*

4. *Deep Purulent Sinuses in the Mamma.*—H. D., aged eighteen, a delicate looking young woman from the country, was admitted to St. Mary's Hospital, under the care of Mr. Ure, Jan. 23rd, 1862, for an affection of the left mamma. The breast was perforated in several places by sinuses, some of which could be traced under the gland, and from which there was a discharge of sero-purulent matter. It felt hard, somewhat fuller than the other, and was the seat of occasional throbbing pain. The nipple was partially obliterated. The complaint commenced about five months previously with abscess, which the patient ascribed to a blow on the part. The catamenia have been regular ever

since they set in, a year back. The patient had the advice of a medical practitioner in the country, who recommended poulticing, and eventually her removal to a London hospital. When admitted, she was in a state of nervous trepidation, from a notion her relatives had of the complaint being cancerous.

Mr. Ure, considering that these purulent fistulæ were merely deep-seated abscesses, which did not heal owing to the discharge being kept up by a continual slight degree of friction exercised on their sides by the repeated play of the pectoralis major muscle, directed the left arm to be kept steadily bandaged close to the side, with the forearm brought across the chest; the breast itself being simply covered with a piece of lint spread with cerate, in order to absorb the discharge. This was done on Jan. 26th. On Feb. 2nd there was already a marked improvement; several of the sinuses were healed, and from one or two that remained there was a very slight secretion. By the 5th the sinuses were all firmly closed. In two days after she returned home to the country with a sound breast.

Mr. Ure, in some clinical remarks, alluded to various plans of treatment which had been resorted to in cases of this description. Mr. Hey's practice was to trace the course of all the sinuses, and lay them open; and he asserted that unless this were done with respect to every one of them, the cure could not be accomplished. This treatment, it must be confessed, was severe. Among other measures which have been employed may be enumerated compression, astringent injections, cauterization, and the seton; in failure of such measures, Mr. Lawrence, in his Lectures on Surgery lately published (p. 174,) says—"It will be necessary to lay the part open by simple incision. Should the tube be long, one half may be cut at first, and the other after the first incision has healed."—*London Lancet.*

5. *Cases of Iridectomy, for Relief of Acute Glaucoma and Irido-Choroiditis.*—The theory is by no means well established upon which the excision of a portion of the iris is now so successfully resorted to in that hitherto hopeless and intractable disease, glaucoma. In the acute forms of glaucoma the deep tissues of the eyeball are involved in a diseased action, which manifests itself by darting pain, flashes of light, rapid loss of sight, tension of the eyeball, cupping of the optic disc, and subsequently, turbidity of the transparent media, slaty discoloration of the iris and loss of the corneal brilliancy. But experience leaves no doubt of the favorable change in these symptoms which follows the operation of iridectomy in such instances.

An illustration was afforded of the utility of the operation in a case recently under the care of Mr. Hart in the ophthalmic wards of St. Mary's Hospital.

The origin of the mischief was an injury, rather more than two months previously, to the right eye-ball. In that organ the disease had advanced to a very serious extent. The cornea was dull and lustreless, looking rough and somewhat opaque. The iris was slate-colored, and the turbidity of the vitreous prevented any satisfactory result of ophthalmoscopic examination. There was barely any perception of the difference between strong light and utter darkness. The left eye, which had sympathized throughout, had recently become highly amblyopic; it was very tense, the iris acted sluggishly, and the optic disc was distinctly excavated. Under these circumstances Mr. Hart performed iridectomy on both eyes, the patient being under the influence of chloroform. Relief to the distressing pain which had existed was felt on the same night. The medical treatment was of the simplest kind; purely expectant and regulative. But the symptoms continued to improve, and the patient left the hospital three weeks afterwards with vision greatly ameliorated in the left eye, and perception of light gradually increasing in the right.

In another recent case, iridectomy was performed with the view of relieving tension and improving vision in an eye which had many times been attacked with iritis, and in which the iris was adherent, the capsule of the lens thickened by deposit of lymph, and sight greatly obscured.

Mr. Hart observed that the extent of adhesions in these cases greatly favored the recurrence of iritic inflammation, and it was to be regretted that atropine is not more freely used by the profession generally in the early treatment of iritis. The tension of the eyeball, which was acutely sensitive to pressure, the variosity of the vessels, and especially the extent to which the opposite eye was suffering by sympathy with the peccant and almost useless organ, induced him to resort to iridectomy. This would have the effect of removing intraocular pressure, and of reëstablishing a free communication between the anterior and posterior chambers; it would, he expected, relieve the distressing frontal pain suffered by the patient, and improve sight; especially, he anticipated that it would diminish the liability to further recurrence of the choroido-iritic inflammation, and would also check the insidious progress of destruction in the other eye, which had already suffered to some extent. The patient is still under treatment, and doing well.—*London Lancet.*

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Peruvian Physicians.—Dr. Markham, in his travels in Peru, describes the physicians as a wandering class. With their wallets of drugs on their backs and dressed in black breeches, a red ponchof and broad-brimmed hat, they walk in direct line from village to village, as did their ancestors in the time of the Incas. It is remakable that they should never have discovered the febrifugal qualities of the cinchona.—*London Lancet.*

A Cure for Fistula Lachrymalis.—M. Delore states, in the "Transactions of the Societe des Sciences Medicales of Lyons," that in four cases out of nine he succeeded in curing his patients by perforating the lachrymal bone, and placing in the cavity thus made a cone composed of arsenical paste. It is, however, difficult to say whether the perforation or the caustic ought to have the merit of the cure.

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ARTICLE I.

Diseases of Old Age.

[A Paper read before the Cincinnati Academy of Medicine.]

BY D. S. GANS, M.D., CINCINNATI.

In fulfilling my task to lay before you a report upon the diseases belonging to old age, I do so with great diffidence, partly on account of want of self-confidence to be able to do justice to the subject, partly on account of the fact that, notwithstanding the great spirit of research and investigation of the present age, the age of scientific progress, in which men's intellect penetrates into the innermost of nature and unfolds her fabrics to its scrutiny, (although as the result of this books and books have been written, and that almost yearly, upon the various branches of medical science, by great men and small,) it is surprising that the literature upon the subject in question has at all times been very meagre; as if the scientific world, equally with mankind in general, were shrinking from looking upon the grand finale of nature's best handiwork, and from investigating the conditions and processes of the decay of that mechanism, which it has and will yet take ages to understand in all its workings.

Innumerable books have been written upon cholera, typhus, phthisis, diseases of women and children, etc., but the sick old man is left unobserved and unnoticed. It is true that we are not able to stay or remedy nature in her physiological and pathological course downwards, or prevent her from "unto dust thou shalt return;" still it seems reasonable to conclude that, if we will at all arrive at a perfect knowledge and understanding of the physiology and pathology of our organism, of life itself, it is not sufficient to investigate and possess a correct knowledge of its first beginning in the simple cell, and its gradual development up to the perfection and vigor of manhood, but it will equally be necessary to study and investigate the alterations and metamorphoses taking place during these processes in their downward tendency.

But more. Just as it is the task of more modern medicine to remove the great morbific causes, to prevent diseases, it is likewise our task, by studying the physiologico-pathological peculiarities of old age, to find means to ameliorate and modify them and to prolong life. Already in the remotest antiquity they endeavored to modify the ills of old age and lengthen life. Did not King David, when he became old, choose a young wife to warm him? Galen and Paulus Æginetta recommended to choose large and strong young men for bedfellows, as a means to warm and strengthen the body. In the middle ages, the alchemists, particularly Paracelsus, furnished panaceas and elixirs to prolong life. Even in the seventeenth century, a Dr. Wren proposed transfusion of blood as an effective means to juvenize man, and mesmerism was once held up as the same rejuvenator. But all these endeavors remained partly ineffectual, and only the progress made in the laws of rational hygiene and a scientific practical dietetic were capable of augmenting the average duration of life, which was in the Fourteenth century 17, in the Seventeenth 26, and in the Eighteenth 32 years, to 39 of modern times.

Instead of treating of one or more diseases peculiar to old age, I will, therefore, take a brief review of some of the principal physiological, anatomical and also pathological conditions of the altering organism, and those diseases which are either based on these conditions itself, or which become essentially modified by it. The only modern works on diseases of old age are those of Dr. Durand-Fandel, 1857, and of Dr. L. Geis, of Nurnberg, 1860; and the latter being the most complete and comprehensive one ever published, I have made that work the principal basis of my report. Dr. Geis had a twelve years' experience as physician to the Nurnberg Institute for old people.

PART I.

Physiological and Pathologico-Anatomical Alterations in Old Age.

The human organism has completed its development at the thirty-fifth year, up to which period the respiratory capacity of the lungs is progressing from year to year in increasing extension, as proven also by the investigations of Hutchinson, Andral and Gavarret. The decrease of the general weight of the body and its height, as also the relatively greatest decrease of respiratory capacity, are the general alterations of old age, forming not only a line between this and vigorous manhood, but dividing the same into two sections or periods. For the relatively greatest decrease of respiratory capacity commences in both sexes from the sixty-fifth year, the lungs having lost from that year during the following decenniums in respiratory capacity, in men twenty, and in women thirteen cubic inches medium calculation. Just as the first decrease of respiratory capacity in the thirty-sixth year divides, so to say, the age of vigorous manhood into an earlier and later, the relatively low sinking after sixty-five divides the period of old age into an earlier and later.

In passing over to the senile alterations of the different organs and tissues, etc., I can only speak of the principal ones, as otherwise this paper would become too lengthy, unless one were writing a work on the subject in question. About the physiological alterations of the chylopoetic system Dr. Geis has made his investigations. The decrease of the weight of the body in man being not so rapid and less than in woman, having declined in the former about the eightieth year six, and in the latter seven kilogrammes, he tries to calculate the diminution of the digestive fluids by the decrease of the weight of the body. According to these calculations, if the total amount of digestive fluids are set down at forty years in man for twenty-four hours at 10·0 kilogrammes, this has, in proportion to the weight of the body, diminished at sixty years of age 0 32, and at ninety 0·94 kilogrammes. Suppose that the quantitive relations of the solids to that of the digestive fluids remain the same, they will have suffered at ninety a decrease of 29·2 grammes. The same relations exist in the woman. At a weight of body of 56 kilogrammes at fifty years, and at a total sum of 8·750 kilogrammes digestive fluids with 271.225 grammes solid substances, the loss at ninety amounts to 0·99 kilogrammes digestive fluids and 30·7 grammes solid substances.

Observations and calculations about the average quantity of food for twenty-four hours show that the man needs, even at a very advanced age, a larger quantity of food than the woman, even at the age of 65–75 (the beginning of the second section of old age); that in both the necessity for food becomes less with the decennium 65-75, in perfect correspondence with the decrease of the digestive fluids and the weight of the body observable about the sixtieth year. The decrease of chyle in man up to ninety is 0·24 kilogrammes, and 0·75–0·77 kilogrammes lymph; in woman 0·25 kilogrammes chyle, and 0·98–1·01 lymph. The spleen suffers in both sexes the greatest loss from the seventieth year, and differs very much from the liver, which suffers only in the last decennium of life its greatest loss. From the seventieth year the weight of the spleen remains in man almost the same. In woman it is otherwise,—the loss after eighty is as much as before. In the earlier period of life the sex does not show a difference in its weight, and also in the last decennium the difference between the sexes is trifling. But very great are the differences of the minimum and maximum weight through all the decenniums, and point to a great variation of weight of the same organ at different times.

Alterations of the Arterial System.

The heart, in common with the kidney, is the only organ of the human body which does not suffer an alteration of its weight by age. Dr. Geis could not in seven hundred examinations make out the medium decrease of weight (by decenniums) caused by old age. He found the following weight in grammes, from 60–93, in both sexes to be constant:

	Minimum.	Medium.	Maximum.
Man....................................	233·906	292·382	350·784
Woman	190·074	263·142	350·784

According to these weighings, the heart of old women is lighter in weight, being generally also smaller. The variations of weight between the maximum and minimum are however in women greater than in men. Where the maximum of weight is found in the woman, it happens principally from sixty to seventy.

The increase of cholesterine in the blood, observed by Becquerel and Bodier, is not only found by Dr. Geis to be correct, but he found even with the advancing age a progressive increase of it.

In reference to the movement of the blood, the medium frequency of the pulse goes hand in hand with the temperature, which increases again in old age; a constant retardation of the pulse forming the exception. Dr. Geis examined in this respect 452 old people (164 men and 288 women) during two winters, always at the same time, in the afternoon from three to five o'clock. The pulsations were counted for a full minute, a necessary precaution on account of the frequently unequal and intermittent condition of the pulse. The majority of the examined individuals lived in the Institute under equal circumstances, in the same temperature, and living on the same kind of food. All were relatively well; exquisite cases of diseases of the heart and lungs were excluded. The following was the result of these examinations:

MEN					WOMEN				
No.	Age.	Minimum.	Medium.	Maximum.	No.	Age.	Minimum.	Med'm.	Max'm.
24	55–65	60	61·08	75	10	45–55	60	67 06	70
76	65–75	60	72	90	40	55–65	60	70·01	80
52	75–85	60	72·08	90	136	65–75	60	75·02	96
12	85–92	60	75·01	86	88	75–85	58	77·07	100
					14	85–93	73	84·02	112

The medium number shows in both sexes a progressive increase of frequency during each decennium. The minimum number is in both more frequent than the maximum ; or, in other words, in the extremes of the frequency, the sinking under the medium number preponderates,—and this explains likely the erroneous opinion of the older writers, by a comparatively small number of observations, namely, that the frequency of pulse in advanced age becomes lowered. The observations made on a yet larger number of individuals equally contradict the hardness, inequality and intermission ascribed to the pulse of old people, they happening only at the most advanced age and at a high degree of rigidity of the trunks of the vessels. The pulse of aged people as a diagnostic sign is very unsafe, and shows more in that respect by its retardation than by its augmentation.

The Anatomical Alterations of the Respiratory Organs.

The pure senile involution of the same, independent of other causes, like compression of the parenchyma, are less prominent and more seldom. In 500 cases, only 80 were found (28 men and 52 women.) The weight of the lungs in man, taking the two decenniums of 65–85 together, may be set down, according to those weighings : the left at 350·784–526·176 grammes, the right at 526·176–613·890. In the decennium 85–92 the effect of the involution upon the weight is decidedly striking. Here the weight of the left lung falls frequently under 350·784 grammes, and passes seldom beyond it ; that of the right varies usually between 350·784 and 526·176 grammes. More constant were found the weight of the lungs in woman, and the fifty-two examined showed a medium weight, during the decenniums of 65–85, of the left lung 380·022, the right 409·260 grammes ; in the decennium of 85–93, the left 358·093, the right 380·022 grammes. Hence the medium weight of the lungs of the man from 65–85 would show, according to these weighings, that they are 219·231 grammes heavier than those of the woman, but approaches that of the woman in the last decennium considerably. The weight of the right lung falls in both sexes, in the decennium 85–93, to that of the left, in the former decennium. If we look for the total sum of the decrease of *weight in both sexes during* the last decennium, we find in man a decrease of 219·249, in woman only 51·167 grammes, an observation the more interesting as it corresponds exactly with the great sinking of the respiratory capacity of man during the last decennium of life.

The investigations about the physiological senile alterations of the respiratory system were made on the same individuals, and under the same circumstances and conditions as above stated. The medium number of inspirations in the physiological condition were found during all decenniums of advanced age to be 17 in man and 18 in woman in a minute; besides, the sexes differ in the second period of old age by a slight tendency to retardation of the respiratory movement in man. The variations within the physiological latitude of respiration in advanced age is at all trifling. They are expressed in the maximum by the number 6, presenting themselves plainly in man only from the seventy-fifth year, in woman earlier; and suffer in the latter a farther decline during the last decennium of life, after the variations during 65–85 had been more limited. The respiratory movements remain pretty much the same through all the decenniums of life, which may find its explanation in the character of the inspiration. The maximum of twenty-two inspirations, which is stated to be in woman physiological, stands at the highest extreme and forms the connecting link with pathological respiration. Of 164 men, 124 had 18 inspirations in the minute, and only 40 above and below the medium; of 288 women, 198 had 18, and 90 formed an exception. The number 18 is consequently the one which is found the most frequently, and only in women the two decenniums of 45–55 and 85–93 make an exception. During that period, the majority of the women examined stood above the medium; and this depends partly upon the climacteric period of life, and partly upon the general tendency of the augmentation of respiration in high old age. The latter is particularly predominant in women in which 20 inspirations is the number mostly found in advanced old age. The relation of the frequency of the pulse with the inspiration, the maximum, minimum and medium of both taken in consideration, was found in both sexes during all the decenniums to be four pulsations (medium) during one inspiration, and that the physiological latitude of this relation is a very limited one, the greatest difference not amounting yet to two pulsations, namely, in man 1·97, in woman 1·95. It is a noticeable fact that the entrance of a permanent acceleration of the pulse takes place in women a whole decennium earlier than in man. The result of a large number of examinations, according to sex and decennium, shows that in both sexes the diseases of the heart with augmented frequency of the pulse do not present a corresponding augmentation of respiration, whilst, on the contrary, diseases of the lungs with augmentation of the respiration present constantly increase of the frequency of the pulse. Hence it is possible to draw in general a correct conclusion as to the primary affection of one or the other organ from the relation of the frequency of the pulse to the number of inspirations. This relation is :

	Man.	Woman.
In diseases of the lungs....................	2·08 : 1	2·08 : 1
In diseases of the heart........	3·01 : 1	3·09–3·04 : 1

In reference to the respiratory capacity, examinations made of 600 individuals with the original spirometer of Hutchinson, without reference to weight and height of body, and under circumstances as above indicated, led to the following conclusions :

1. The respiratory capacity of the lungs increases in the period of evolution of human life in both sexes till the thirty-fifth year, reaching with its highest position and concluding the period of evolution. Its increase for each year in man is double that of woman.

2. It decreases in both sexes from the thirty-fifth year, and in correspondence with the general involution of the vital processes.

3. The respiratory capacity of woman stands far below that of man in all the decenniums of life. It does not reach at its maximum from 25–35 the medium of man at 55–65. This holds good even in pathological conditions of the chest. It is, therefore, necessary that examinations of this kind be made in reference to the sexes.

4. From the thirty-fifth year the respiratory capacity never reaches in both sexes the maximum of the preceding decenniums of 15–35. The decrease of this capacity in the several decenniums is not equal. But taking the sum total of the decrease from thirty-five, and which amounts thus to 90·72′ cubic, and dividing it among the single years of the sixth decennium of declining life, it results for each year a decline of 1·51′ cubic.

5. The respiratory capacity reaches its greatest heighth in woman a decennium earlier than in man. The relatively greatest decrease falls in both sexes in the beginning of the second period of old age, in the decennium of 65–75.

6. Height and weight of body produce, within the latitude of respiratory capacity, many graduations of individual capacity ; these measurements consequently possess only relative value.

Besides these examinations made on healthy individuals only, others were made of those in which a diminution of respiratory capacity was caused either by diseases of the lungs themselves or by pathological conditions situated exterior of the lungs, as hydrathorax, senile kyphosis, paralysis, large irresponsible hernias, etc. There exists also here the difference between the sexes, the respiratory capacity never sinking in man at the like pathological condition as deep as in woman. Age does exert here no longer any influence. The extreme minimum amounted for man 37·81′, for woman 25·20′ cubic. In reference to the influence of the respiratory capacity upon the weight of the lungs, the medium capacity of both sexes give, by calculation, the following medium weight in grammes of the lungs:

Age.	Man.	Woman.
25–35	1491·84	1330·56
85–45	1391·04	1270·08
45–55	1260	1118·88
55–65	1128.96	1028·16
65–75	967.68	869·40
75–85	887·04	756
85–92	766·68	665·28

In regard to the exchange of gases, there commences from the thirty-sixth year in man a diminution of the expiration of carbonic gas, and more so in the advanced old age of both sexes. Dr. Geis feels justified in his opinion that the exchange of gases decreases in the same ratio as the weight of the lungs and respiratory capacity diminish with advancing age. The observation of Andral and Gavarret that in women the expired carbonic gas diminishes with the entrance of menses and increasing again after its passage, corresponds with that of Dr. Geis that in the decennium 55–65 the respiratory capacity diminishes and the exhalation of carbonic gas increases.

In reference to the bile Dr. Geis remarks: "From the observations made, it results that not only the quantity of carbonic gas and water exhaled by the lungs and skin in proportion to the decreasing weight of the lungs becomes diminished, but we have also seen that the excretion of carbonic gas further becomes diminished by the constant increase of the inspirations. We know at the same time that the middle-aged person (man,) at an age of forty and a weight of body of 64 kilogrammes, secretes 1·6 kilogramme bile or digestive fluid in twenty-four hours, and that to this weight of body corresponds the exhalations of 808·42 grammes carbonic gas and 466·22 grammes water. Suppose, therefore, that the number indicating the amount of bile secreted in twenty-four hours as digestive fluid represents the amount of carbonic and hydrogen to be excreted by the lungs during the same period, as according to Liebig the bile is principally excreted through the lungs, we would arrive at a correct deduction,—comparing the weight of the body during the several decenniums, and the corresponding amount of secreted bile as digestive fluid, with the amount of carbonic gas and water escaping through the lungs, we would find a considerable, and with the years increasing, retention of bile."

Senile Alterations of the Uropoetic System.

Dr. Geis found the weight of the kidneys in old age to be high. They appear even heavier than in the middle period of life. The medium weight differs in man much more than in woman. Considered in its medium weight, it is not only in general a heavier, but also a more varying one, and seems even in most advanced age to be excluded like the heart from the general laws of the senile involutions of other organs. In woman, the weight declines from decennium to decennium, and the existing involution shows the same relation of diminishing weight as in other organs. The left kidney is in both sexes heavier than the right, and only in the last decennium of life does the left reach the same weight of the right in man.

The quantity of urine, according to the observations of one hundred individuals, passed during twenty-four hours, diminishes in both sexes from the sixtieth year. The quantity remains the same from the seventieth, a phenomenon which happens also in women, but in the decenniums 60–80. From this period a further decrease takes place in woman. Chemical analysis showed the characteristic feature that the excretion of urea and extractive matter preponderates over that of the salts, and that of these latter, soda and chlorine are excreted in larger quantities, whilst the combinations of sulphates and phosphates are retained.

The Brain and the Nerves.

The medullary substance and the small brain decrease in advanced age three per cent. of fatty matter ; crura cerebri and corpus striatum one per cent., probably the thalamus in the same proportion, whilst the medulla oblongata not only retains, like in the middle age, its fat contents, but even becomes somewhat fatter. A remarkable phenomenen is, that the corpus striatum and thalamus possess already in the middle period of life the smallest content of fat. The content of water of the brain increases in advanced age. The chemical composition of the nerves is essentially the same as that of the brain and spinal marrow. But very different is this in respect to the content of fat, water and solid substances, showing a great difference of proportion.

— About the exchange of matter and tissue change, Dr. Geis remarks, that all metamorphoses of involution take place under augmentation of the frequency of the pulse, increase of inspiration and the temperature of the body. Whilst, on the other hand, the respiratory capacity, the exchange of gases in the lungs becomes diminished, the increase of cholesterine presents itself as the only constant alteration of the composition of the blood, and that the static of the tissue change reveals an almost entirely different formation of the mode of excretion of the effete tangible and intangible substances under increased diminution of the reception of oxygen. The system suffers by way of the excretion of the urine a larger loss of nitrogenous substances than it receives by the food ; the nitrogenous contents of the organs are consequently lost in the regressive metamorphosis, and for the reëstablishment of the balance in the loss and gain, the *compensating retention* of fat and carbonic hydrates takes the place of the excreted nitrogenous contents, by which may be explained one of the principal causes of a whole series of the most decided alterations of involution of the system. To this account may be attributed the extensive fat metamorphosis of old age, the high proportion of cholesterine of the blood, etc. ; on its retention depends the vegetable character of the tissues. The retention next of importance for old age is that of the salts and minerals. A little more or less of them does not seem to be without influence upon the further development of the atheromatous depositions in the arteries, upon the fibrous-cartilaginous formations in the fibrous membranes, and upon the consequences of many pathological exudations, etc. The pigment formation stands in immediate connection with the diminished reception of oxygen, as deficient oxydation of the blood in the lungs, and also with the manifold disturbances of the circulation in advanced old age and the obliteration of the vessels. The fundamental difference of the regressive metamorphosis of old age with its increased temperature, its increased frequency of the pulse and respiration, from real fever, consists in the compensating retention of the carbonic hydrates relatively to the plus of the nitrogenous excretions. If now the increased expenditure of nitrogen of the system of old people is not to be considered as cause of those apparent febrile symptoms, neither an increased reception of oxygen, as this sinks in reverse proportion to the increase of the temperature of the body, nothing is left but to consider as the probable cause of this remarkable alteration the different formation of the exchange of matter itself, which may be supposed as being more or less withdrawn from the moderating and regulating influence of the nervous system. Further, the cause of the increased temperature may depend upon the presence of a larger amount of decomposable and just decomposed tissue contents, as, according to the observation of

Moleschott, already a separation of compound bodies forms a sufficient source of development of heat, and we attribute even to a small quantity of oxygen the commencement of great chemical changes.

PART II.

Pathology of Old Age.

An almost natural passing over from the considerations of the anatomico-physiological alteration of old age to that of the pathology of the same forms the influence of season, mortality, etc., upon both. The laws laid down in that respect (by the mentioned author) are based upon observations during twelve years of 6778 individuals (1512 men and 5266 women) of an age from 60–93 years. The influence of the different months upon the advent of sickness shows it in the following order: March, January, November, October, February, April, May, June, December, August, September, July. There died from October 1st, 1843, to 1855, in the mentioned Institute at Nurnberg, 514 old people (153 men and 361 women) at an age of 60–93 years. Of these there died at an age of from—

Age.	Men.	Women.	Age.	Men.	Women.
60–69	38	52	80–89	40	111
70–79	74	186	90–93	1	12

The influence of the month upon the mortality: April, January, March, December, June, February, May, October, September, August, November, July. It is also shown that this influence has been the same since 1795.

From these facts it seems that the spring months are more dangerous to old age, particularly the month of March.

In reference to the time of day in which death takes place, it seems that this happens mostly in the hour after midnight and in the early hours of morning. Next stands the afternoon, then the forenoon, and last in order come the hours from night till midnight.

Marasmus Senilis.—There seems to prevail a want of correct understanding about the nature of senile marasmus. Most generally the term is used to indicate the natural, regular alterations of involution of the whole organism collectively and individually of its various organs, systems, etc. Dr. Geo. E. Day, who published a work on the diseases of advanced life, in 1849, says: "By the term atrophy or marasmus I mean to imply a wasting away, whether of the whole system, or of a single organ, from a mere deficiency of nutrition, etc. It is not so much a disease as the gradual wasting of the system." This *is not considered so by Dr.* Geis. It appears that sometimes certain organs or systems are implicated much more in the process of senile involution than the rest of the body. This he calls marasmus senilis; considers it therefore as a heterochronia of those regular involutions. It may develop itself in any organ in any system, but can only proceed from such which are indispensable to the existence of the whole. It may take place within the period of old age proper, but may also happen during manhood and earlier, (young old age.) (It is generally engrafted on other complaints, assuming their character and accompanying them in their course. There is hardly a disease at this period of life with which it may not connect itself.)

As a special form of marasmus senilis, the *climacteric disease* has to be considered, which in general attacks suddenly healthy as well as sickly aged persons after a strong causation, as depressing mental impressions, severe atmospheric influences, etc., and may be considered as acute marasmus in comparison to the marasmus senilis as a chronic one. The result is always fatal, and its course more rapid than that of marasmus senilis, and its duration much shorter. In this Dr. Geis differs also with others and Sir Henry Halford who seems to be the first who used the term climacteric disease, but his description of the same is what the first describes as chronic or simple marasmus.

Among the *diseases of the skin,* prurigo, pemphigus and chronic erysipelas are the principal cutaneous diseases of old age, but not to the exclusion of others. Pemphigus is relatively seldom. Prurigo exists sometimes previous, and continues with it. Febrile symptoms precede sometimes the eruption, but it appears mostly suddenly during the night, without feeling of sickness having preceded it, in old people who have not left their bed for years. It attacks all parts of the body, but in preference the extremities, and rather the upper than the lower. The pemphigus probably depends upon the senile alterations of the skin in general, and especially upon peculiar local nutritive derangements of the same, rather than upon a dyscrasia.

More frequent is erysipelas. The form and progress of the febrile erysipelas does not differ materially from that of an earlier period of life. The chronic erysipelas happens mostly on the lower extremities. A peculiar form of phlegmonous inflammation, which happens not very seldom, is the angina Ludowigii, cynanche sublingualis, inflammation of the subcutaneous cellular tissue of the neck. It attacks very old people from 73–86, and is constantly fatal.

Of the *diseases of the muscular, fibrous, bony and cartilaginous system,* Dr. Geis considers the myotalgy senilis and arthritis senilis as two pathological conditions belonging exclusively to old age.

Almost the fourth part of all old people, and proportionally more at a very advanced age, suffer from myotalgy senilis. They complain of indefinite, vague, tearing, pulling pains of the muscles of the trunk and the extremities, presenting themselves here and there without tumefaction of the parts or febrile symptoms, with much difficulty of motion of the same, lasting a longer or shorter time, occasionally shooting through like lightning, and producing at a longer duration according to the seat, various sensations. Particularly are these, pains produced by trying to move, whilst at rest they are absent. The seasons have a great influence. Of the one hundred and six cases observed, thirty-eight happened in the summer, thirty-two in the fall, twenty-four in the spring, and twelve during winter. The commencement of the cold season brings with it improvement. It happens from the 70–90 year. It is chronic, and differs from the simple atrophy of old age by the pain; more difficult is its distinction from chronic rheumatism. But its chronic stubborn character, its happening in advanced age, the absence of a plain, occasional cause, its unmistakable connection with the involution of the muscular system, which rather excludes the predisposition to rheumatism, its frequent connection with cramps of the muscles, which also is dependent upon nutritive derangements of the muscular system, etc., characterizes it as an idiopathic affection, as muscular pain, which, under certain circumstances, accompanies the involution of the muscular system; the affection has its seat very plainly in the muscles. Articular tumefaction, febrile symptoms, reflex action upon the general system, upon excretion or secretion, are absent. The involution of the system proceeds undisturbed by it. Canstatt does not deny the existence of this myotalgy, but considers it of rheumatic character. Day does not mention this myotalgy at all, and speaks only of different forms of rheumatism. Besides mechanical alteration of the vertebral column and the senile nutritive derangement of the muscular system, which may serve as guides in the diagnosis of the myotalgy and its nature, the age of the individual, the general nutritive condition of the same, finally, atmospheric influences which favor the nutritive derangement, have to be taken into consideration. Closely related with myotalgy are the cramps of the muscles, particularly in the lower extremities.

The *arthritis senilis* attacks in preference women; and premature involution, with marasmus of the fibrous and muscular system as predisposition, and deleterious atmospheric influences as occasional causes, *forms the fundamental* condition for its development. Dr. Geis, basing upon the observation of the predisposing senile constitution and its characteristic signs, does not separate the premature involution of the muscular system from that of the fibrous; he equally considers that mixed forms, described as rheumarthritis, arthritic rheumatism, are nothing else but a stronger participation of the muscular system and the aponeurotic extension in the articular inflammation; and in many cases the seat of the affection in the tendons, but particularly in the aponeurotic extensions, can easily be recognized. "Certainly the worst reflex action upon the different organs have been wrongly ascribed to arthritis. All rigid formations, anchylosis, ossification, the whole atheromatous process, ossification of the valves of the heart, were imagined to be of arthritic origin. This is certainly going too far, for all the named pathological conditions are met with as the natural effect of this involution, without arthritis. Particularly, we can not ascribe to the arthritis any special reflex effect upon the valvular apparatus of the heart." I have here to remind you that this certainly refers only to senile arthritis, in contradistinction to that of earlier periods of life, as otherwise this declaration would be contrary to the observation of every practitioner.

The most important of the *diseases of the chylopoëtic system* is gastritis, gastro-enteritis, inflammatory fever of old people of Nagel, the typhus senilis of Beau. The gastro-enteritis happens more frequently in the first period of old age than in the second, and seems to be at all of rare occurrence. Amongst five hundred and fourteen autopsies, nine were only found exhibiting the anatomical character. The question arises here, if the local affection of the mucous membrane of the stomach and intestines, as also the general symptoms, have to be considered as a consequence of a primary blood disease? In the opinion of Dr. Geis, many prominent reasons, the whole feature of the disease, its course, etc., speak in favor of the view, that the gastro-enteritis of old age has to be looked upon as a general affection, as a primary blood disease, which, similar to typhus, locates itself in the mucous membrane of the stomach and intestines, presenting as such (blood disease) a sum of symptoms and a course which distinguish it from a primary, local, idiopathic gastro-enteritis. Much oftener do old people, and particularly in very advanced age, succumb to a chronic enteritis, of which a diarrhœa forms often the only symptom. Ulcers and ulcerations of the mucous membrane are found in those cases extending over the large intestines, principally the rectum, and implicating also the lower half of the small ones. The diagnosis is difficult on account of other kinds of diarrhœa happening also in old age. The prognosis is bad. The causes are extremely obscure; as occasional cause may be considered, a cold, getting the body wet,—as proximate, the immediate progress of the acute or typhoid gastro-entéritis into the ulcerative one. More probable it is, that the cause consists in the marasmus of the mucous membrane itself, in a deficient nutrition, in the secretion of abnormal bile and intestinal fluids.

Diseases of the Circulating System.—Of these, adhesions of the pericardium happens proportionally frequent. Of 514 post mortem examinations, at 60–93 years, Dr. Geis found it 26 times. Of the general morbid affections accompanying the adhesions, tuberculosis has to be mentioned; as final fatal diseases, pneumonia, apoplexy, endocarditis, hæmorrhagic infarctus, and extensive pigment induration of the lungs. As frequently as adhesions of the pericardium and plastic vegetations are observed as consequences of pericarditis, as rarely does this or any other acute affections of the pericardium happen in old age. The adhesions date, therefore, either many years back, or it must be supposed that an inflammation exists, which is entirely hidden from our observation. There are no observations about the latter; for the first speaks the notorious accommodation of the adhered pericardium. Dr. Geis did not observe a single case of inflammation of the pericardium.

The *heart* increases in old age in all its dimensions, but these differences in the dimensions are so controlled by the measure of the left ventricle that the right takes either no part, or proportionally very little, in these differences. The right ventricle remains in man in reference to length almost the same, and increases in breadth 4‴; in woman the length increases 2‴, remaining in breadth the same. The left ventricle in man increases principally in length, that of woman in length and more yet in breadth. Not less do both ventricles increase in thickness, and in a striking manner from the base toward the apex, of which the basis of the right ventricle of men forms an exception. These measures are not to be considered as pathological yet, for they are the necessary consequences of the involution of the organism itself, of which for the senile formation of the heart, the gradual diminution of the general quantity of the blood and the senile involution of the lungs are of primary importance. In consequence of the diminished blood quantity, the capillaries become obliterated; from which results a disturbance of the capillary circulation, which does not check the *vis a tergo* of the heart, but increases it, on the other side giving occasion to engorgement and stasis of the venous blood. The lungs are capable to admit, proportionate to their senile involution, but a constantly diminishing quantity of blood, and are consequently sending a corresponding small quantity to the left heart. The next consequence of this is, that the left ventricle also has to accommodate itself to the received diminished quantity, which is affected by its diminution of capacity, concentric hypertrophy, this becoming installed by the necessity of overcoming the obstacle in the capillary circulation. The effect of this concentric hypertrophy is not limited to the left ventricle. The ventricular partition becoming equally hypertrophied, presses mechanically into the volume of the right ventricle, diminishes passively the capacity of this, and accommodates it to the diminished capacity of the lungs. The resistance which the right ventricle experiences from the lungs gives occasion to increased efforts and action, and with it to hypertrophy, but which, however, affects less the walls than the papillæ and trabeculæ carneæ. A further consequence of these alterations of capacity of the ventricles—principally of the right, it sending to the lungs a proportionately smaller quantity of venous blood as at all might be carried to them relatively to the existing quantity,—I say the next consequence is a retrogression of this blood, from which must result a passive dilatation of the right atrium, besides the general surcharged condition of the venous system.

In reference to the frequency of the atheromatous process, Dr. Geis found among two hundred hearts of old people thirty-three which deviated in any manner from the physiological senile conditions of the heart, and in which insufficiency and stenosis of the semi-lunar valve of the aorta were found, in the following proportion:

Age.	Men.	Women.	Insufficiency and Stenosis.
60–74	34	53	6 men, 8 women,
75–84	36	53	7 " 6 "
85–93	9	15	1 " 5 "

In the majority of the cases (twenty) concentric hypertrophy of the left ventricle existed, in the minority (thirteen), excentric. The mitral valve was in most cases the seat of atheromatous depositions, but only on the free margin and without insufficiency. The degeneration is,—according to the above number, more frequent in very high advanced life than in the earlier decenniums, admit, consequently, generally a better prognosis than the stenosis of the mitralis. The atherosis of this valve last mentioned and its ostrium venosum was found fifty-seven in the two hundred, depending exclusively upon degenerative nutritive derangement, as follows:

Age.	Men.	Women.	Insufficiency and Stenosis.
60–74	84	58	13 men, 21 women,
75–84	36	53	7 " 10 "
85–93	3	9	2 " 4 "

Of the neurosis of the heart the stenocardia is almost the only one which is observed in old age, principally in man. Simple or degenerative nutritive derangement of the heart, insufficiency or stenosis of the cardiac ostrium and its consequences, even inflammatory processes, may present quite similar phenomena, particularly stenosis of the mitralis ; but the pain peculiar to stenocardia will be absent, and the pain will have to be looked upon as the principal differential diagnostic sign from all other cardiac affections. It (the pain) determines the diagnosis and impresses upon the affection the character of a neurosis. The stenocardia is to be defined as clonic spasm of the heart with hyperæsthesia, which is found principally with pathological conditions of the heart, particularly fatty degeneration and affection of the mitral and aortic valves, especially in very advanced age. According to Bamberger, the stenocardia is seldom, perhaps never, a pure nervous derangement. On the contrary, morbid conditions of the heart exert an abnormal stimulus upon the cardiac ganglia or upon the cardiac plexus ; but still the question about the idiopathic or deuteropathic affection of the respective nerves is yet an open one.

Gangrene, which attacks old people particularly during the first decennium of the second period, and which may be dry as well as humid, depends next upon arterial obturation, upon thrombosis and embolia. It does really not exclusively belong to old age, but is favored by the pathologico-physiological involutions, processes and conditions, principally of the circulating system and by general nutritive derangement. If we have to consider the necrosis, the gangrena senilis proper, like Virchow and Gendrin, depending upon debility or upon simple or degenerative disturbances of nutrition of the fleshy part of the heart, and upon that of the arterial and venous system with relaxation of the capillary circulation, it is not said by this that thrombosis and embolia as causes of mummification and gangrene are excluded. Both forms happen in old age, and it is not ascertained yet which of the two is the most frequent.

The Pathological Conditions of the Respiratory System.

These may be classified into three principal groups, based upon their pathologico-physiological relation, namely : 1, Chronic congestive conditions ; 2, The effects of compression and atrophy of the parenchyma, and 3, The consequences of chronic inflammation. They correspond from a pathologico-anatomical point of view to the pathological condition of the bronchiæ and bronchial mucous membrane, the parenchyma and the interstitial cellular tissue.

Chronic congestion presents itself as senile catarrh, senile bronchorrhœa, in the highest degree as phthisis-pituitosa. Independent of the influence exerted upon the production of the senile catarrh by a marastic or diseased cutis, from a disturbance of the physiological equilibrium of the excretions, upon which Durand-Fardel lays much stress, Dr. Geis finds on the contrary in the pathologico-physiological senile condition of the lungs the regular senile alterations and modus of the circulation the principal causative points. The vesicular emphysema is the first necessary consequence of the former. Those symptoms of the emphysema which grow out of the altered form of the thorax are in old age of subordinate value, for the same (the form) depends too much upon other senile alterations which the bony and fleshy parts have suffered. The bronchiectasis is considered not dependent as much upon the catarrh as upon atrophy of the pulmonary tissue. Dr. Geis says, "In the same proportion as the atrophy progresses, the obstacles to inspiration increase, and it is the inspired air pressed in under the most violent efforts which dilates the bronchias of the second order, these being in a chronic congestive condition by pressure upon them ; and this the stronger the more the bronchias of the last order have perished by the atrophy of the pulmonary tissue, the exchange of air becoming forced more and more toward the centre of the lungs. If, as certain signs of this condition, the sputa assume a fœtid odor, the color of a dirty pus, and becoming copious, the stagnating air, the pulmonary tissue in decomposition, the deficient oxidation, has the most positive influence upon it." This view seems to be supported by the following facts : The catarrh always extends over the entire bronchial mucous membrane, whilst the bronchiectosy is partial only in one lobe, which difference points decidedly to the impossibility of the catarrh producing by itself bronchiectosy. That, on the contrary, another more important cause, one which prevents the exchange of air, the atrophy of the pulmonary parenchyma must be present. The asthma senilis is associated with catarrh of the bronchial mucous membrane more decidedly than is the case in bronchiectosy. The catarrh precedes the asthma and exists with it.

The asthma is always based upon organic alterations, or if a nervous character is supposed, its development can only be considered as growing out of the senile altered condition of the respiratory system. The nervous affection which may give rise to the asthmatic attack has its occasional causes, which have to be looked for oftener exterior than interior of the system ; and the effect of these causes, instead of an increased nervous influence, is a debilitating, relaxing one, which suspends during the attack the controlling influence of the nervous system. "The spasm of the submucous muscular layers of the bronchias," says Dr. Geis, "can not therefore be considered as the cause of the senile asthma, but paralysis and subparalysis of the pulmonary vesicles, in consequence of suspended innervation, we ought not to look upon these paralytic pulmonary vesicles as being in a contracted condition. The never absent, preëxisting senile emphysema, the proportionately larger quantity of retained respiratory air in the senile lung, have already produced a condition of the same, which, consisting in dilatation and alteration of form, presents almost already a subparalysis, not admitting a spasmodic closure."

For the development of the second group of pathological conditions of the respiratory system, the compression and atrophied condition of the pulmonary tissue, the hydrothorax, consequent upon pulmonary atrophy, is not without reflex influence, exerting a passive pressure upon the pulmonary texture. The real compression and atrophied condition of the lungs present themselves principally as "pigment induration" and as "carnification." The former is never found extended over a whole lung, seldom in both lungs at the same time, and more seldom in the middle lobe of the right lung or the lower or upper half of the upper and lower lobe of the left lung. This is intimately related with the manner of the development of the pulmonary atrophy, which takes place also, but partial and the most frequent, in the upper lobe, where in consequence of senile kyphosis the senile alteration of the thorax, the ossification of the articulations, the chest is the most difficult dilated and the respiration the most laborious.

The third group of pathological conditions of the senile lung are the consequence of chronic inflammation, whose sphere is the interstitial interlobular cellular tissue. Pulmonary cirrhosis, asthma and carnification of the parenchyma are but accidental affections, which, although the manner of their development presupposed a senile alteration of the lungs, do not result necessarily from the senile condition, but require for their production a particular occasional cause existing exterior of the lungs. These causes are, however, developed in great obscurity.

Pulmonary tuberculosis is not very seldom, even acute tubercular deposits are observed. Amongst all the symptoms which accompany phthisis in old age, *i. e.*, in the second half of the same, the great secretion of urine in all cases observed is very prominent. Phthisis of old age is distinguished from that of the earlier period of life by the absence of the colliquative perspiration and diarrhœa. The first in consequence of the altered cutis, the latter in the absence of the ulceration in the intestines, at least to the usual extent, and that a more copious secretion of urine takes its place. The other symptoms, dyspnœa, hæmoptysis, pain, fever, may be present, but in a lower degree. The tuberculosis attacks the larynx and trachea also in most advanced age.

ART. II.

Treatment of Menorrhagia.

BY L. J. WOOLLEN, M.D., JEFFERSON CO., INDIANA.

Some five years ago, having to treat a very stubborn case of menorrhagia, I was led to adopt the following treatment, which proved eminently successful :

The patient had been similarly affected five years before, and after an illness of five months, made a good recovery. When I first saw her she had been troubled three months, and was totally helpless from loss of blood. She had been under the treatment of three physicians, who failed to relieve her. I tried the usual remedies, but found no benefit from them. On making my third visit to the patient (who lived some four miles in the country,) I found her evidently sinking, pulsation being barely perceptible in the radial artery. In this extremity I determined to resort to a course of treatment somewhat original. Having procured a fine sponge, I thoroughly cleansed it, soaked it in a strong solution of tannic acid, and applied it high up to the os uteri externum. I then directed that the sponge should be kept constantly wet with the solution of tannin by means of a large male syringe, the point of which was applied to the upper portion of the sponge, and the injection thrown in with considerable force. At the same time I gave gallic acid in such doses as the stomach would tolerate, every two hours. Brandy was also given. On visiting my patient next day, I found the discharge of blood had entirely ceased. She was troubled for some two or three weeks afterwards with a discharge of semi-purulent matter, evidently the result of extensive ulceration, but under appropriate treatment that ceased, and she made a good recovery.

Since that time I have met with several cases of menorrhagia, but have found no trouble in arresting the disease by the means above mentioned. Of course every case of menorrhagia does not require the use of all the above mentioned means, the internal use of gallic acid alone being sufficient to arrest most cases ; but where the disease is at all stubborn I resort to the sponge and solution of tannin, knowing that by such means I can speedily arrest the disease. In using the sponge no particular caution is needed, save that it be withdrawn in the course of twelve hours and thoroughly cleansed, or a new one substituted.

I am aware that all the above remedies have been used, but the point to which I desire to call attention, is the combination of the various means.

ARTICLE III.

Fracture of Internal Condyle of the Os Humeri.

BY S. SEXTON, M.D., CINCINNATI, OHIO.

Case.—Mary D., Canal St., between Elm and Plum, Cincinnati, O. This fracture was the result of a fall April 30, 1863, while the patient, a little girl of eleven years, was "jumping" the hawser of a canal boat which was lying in front of where she lived. I saw the patient in half an hour after the accident. She was suffering much from pain at the elbow joint. Upon making an examination of the joint I was led to believe, from the appearance of the parts, that there was dislocation of the ulna backwards. But I soon discovered that the altered condition was owing to a fracture which separated the internal condyle from the shaft of the humerus. Crepitus was distinct upon seizing the condyles of the injured limb with the hand, and moving the fore-arm upon the arm. The fracture was oblique, separating the fragment from the other condyle and body of the bone. Upon bending the arm the ulna resumed its natural situation, and the apparent dislocation disappeared.

Treatment.—The elbow joint was enveloped loosely in a roller bandage and the limb kept at a right angle by the use of a binder's board splint, it being the only accessible one that night. Cold water dressings were ordered. The following day there was considerable pain and swelling. The pasteboard becoming useless on account of its absorbing water, was replaced by a splint made of wire-webbing. Cold-water dressings continued.

May 5.—The inflammatory symptoms having subsided in a great measure, a Smith's anterior splint was applied. The patient from this *time complained of no pain*, and was in regular attendance at school

May 21.—The splint was removed and passive motion ordered, also frictions and slight stimulating applications.

June 1.—Patient has very free use of the limb, rotation being perfect. Flexion and extension are a little interfered with, owing to the deposits that remain unabsorbed in the depressions of the lower end of the humerus for the olecranon and coronoid processes of the ulna.

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Proceedings of Societies.

Proceedings of the Cincinnati Academy of Medicine.

Reported by W. T. Brown, M.D., Secretary.

Hall of Academy of Medicine, April 27, 1863.

Malignant Disease of the Penis.—Dr. Fries said, some five weeks ago he was called to see a patient and requested to come prepared to amputate his penis, stating that the man had cancer. He called in the morning, and upon examination he found the condition of the penis resembling malignant disease; yet it was not possible to determine positively whether it was malignant or not. In the afternoon he called with an assistant, prepared to amputate, if deemed advisable. He then received the following history: Some four or five months ago tumefaction commenced about the glans penis; that was soon followed by difficulty in urinating, and in a short time the patient found he could not pass any urine. Straining very hard, he thought he felt something give way on the inside, probably rupture of the urethra. Tumefaction increased, and matter formed around the head of the penis. His urine dribbled through four different openings. The penis presented a fungoid appearance. He could pass a probe from one opening to another. He laid the sinuses all open, but still found nothing resembling the glans penis. He began to think the disease was really malignant, but concluded to try to break down the fungoid growths to find the glans penis before amputating. After breaking down the fungoid mass for half or three-fourths of an inch, he found something resembling the glans penis. The opening of the urethra was closed for a short distance; this he opened with a bistoury. He then got the prepuce back of the glans and circumcised. He felt satisfied that the growth was not of a malignant character. The man is now well.

He reported the case to prevent any one making the unfortunate mistake of amputating a penis under similar circumstances. Nothing short of a careful examination would have revealed anything but a fungoid growth. The man was a mere skeleton.

Dr. Murphy said Dr. Fries had not stated his diagnosis.

Dr. Fries said at first he was inclined to believe it was fungoid. The man had a very long prepuce,—probably never brought it back of the glans, and the accumulated sebaceous matter was never removed. This he presumed was the origin of the growth. There was nothing venereal that he knew of.

Dr. Murphy was of the opinion that it was a case of syphilitic vegetation belonging to the warty species. He had seen two or three cases developed into cauliflower excrescences from applications that had been made. Specialists on syphilis think cauliflower excrescences are of syphilitic origin. The best syphilographers say secondary symptoms are communicable by inoculation. Warmth and moisture favor the development of these vegetations with wonderful rapidity. He had seen enormous bunches of syphilitic vegetations, looking like cauliflower excrescences. It requires a nice diagnosis. They generally commence on the prepuce, but warmth and moisture cause them to spring up on the glans.

Dr. Fries said he had seen such cases, but this case bore no resemblance to such. Quite recently he removed probably three-fourths of a pound of these syphilitic vegetations from the labia and perineum of a woman in St. Mary's Hospital. These warty excrescences are generally separate and distinct, smaller at the base than farther off.

[Dr. Fries subsequently reported the further history of this case: The penis healed after the operation above detailed, except a small point, from which an ulcerative, phagadenic process was set up, developing finally into well defined malignant disease; and he was obliged to amputate the penis, since which he is doing well and his health excellent.]

Paralysis of the Power of Adjusting the Focal Distance of the Eye.—Dr. Williams reported the following case of paralysis of accommodation of the eye, occurring in a little girl aged seven years. Her eyes looked natural, but had a vague expression; pupils dilated, and sluggish in their action. She could not see to read anything less than No. 16 of Jaeger's Scale. Examining her eyes with an ophthalmoscope, he found the structures natural. The retina he could see easily in the erect position, without any glasses, at a distance of six inches. From this he concluded there was paralysis of the ciliary muscle.

When he directed her to look through a small hole in a copper plate she could see and read better. With convex glasses No. 30, she could read the letters on the sign across the street, and with No. 6 she could read at a distance of six to twelve inches the smallest of Jaeger's Scale fluently. There was a loss of power to adjust her eyes for different distances. In the accommodation of the eye for near objects, the lens became more convex, especially on the anterior surface; and this change in the shape of the lens was produced mainly by the action of the ciliary muscle. The treatment adopted was of a tonic and stimulant character: One grain and a half of quinine and one grain of lactate of iron, three times a day, and wine of opium to be dropped in her eyes. In five days she improved very much. She could read with convex glass No. 10 as well as with No. 6. He then adopted a new treatment based upon theory, and from having read the reports of similar cases treated in this way, viz.: the use of ergot producing the same effect upon the muscle of accommodation as upon the uterus. He accordingly prescribed three grains of powdered ergot with one grain of lactate of iron three times a day. In three days she could read the smallest print with convex glass No. 20 as she had done with No. 6 at first. He continued the treatment, and the patient is now entirely well. She is now unable to read with convex glasses. Some time ago he had a similar case. He put her on the same kind of treatment with like good results. Undoubtedly, such cases have heretofore been treated as cases of amaurosis, and the recovery of sight been considered hopeless. The Doctor said he had also of late a number of cases of hypermetropia, or as termed by some, hyperberesbyopia, occurring in young subjects,—a disease characterized by a natural defect in the refractive power of the eye, so that when the organ is at rest, parallel rays are not brought to a focus on the retina, but behind it. Such persons usually complain of fatigue of the eye when used for seeing near objects, and require the assistance of strong convex glasses. The Doctor promised to speak upon this subject at a future meeting.

Fracture of the Skull with Trephining.—Dr. Fries said he was called yesterday to operate upon a man's head. Yesterday a week ago he was struck probably with a slung shot, producing a long, ugly wound of the scalp. The physician who was called to see the man found considerable tumefaction about the wound, but could detect no fracture. He put in two sutures, and applied whisky and water dressings. At the time he was called in consultation, the wound was filled with hardened coagula. Removing this, there was underneath a collection of pus and blood. From the amount of swelling he was not satisfied that there was a fracture, though he strongly suspected there was. He directed emollient poultices. Saturday there was a free discharge of pus. Passing his finger into the wound, he thought there was depression. However, he continued the poultices until yesterday morning, when the attending physician detected evident depression. Examining the wound carefully he found there was fracture, but the depression was not great. He dissected up the scalp and found an extensive fracture, two and a half inches antero-posteriorly and two or two and a quarter inches transversely, immediately over the longitudinal sinus. He felt some hesitancy in removing so much bone, but concluded to do so. Upon removing the depressed portion the hæmorrhage was frightful. He had never witnessed a case where the hæmorrhage was so profuse. He expected him to die right there. The blood seemed to come from the dura mater. He made use of compressed sponge in the wound, brought the flaps over, and applied a tight bandage. Up to this time, there has been no injurious effect from leaving the sponge in the wound. He removed the bandage this evening. There had been no increase of hæmorrhage. His mind is clear. The Doctor said he would report the result of the case.

Dr. Murphy said he did not think from his reading and from the statistics of the operation, he could have much hope. Four cases in five after being trephined die. He asked himself this question, What induced the Doctor to operate in this case?

Dr. Fries said the pupils were dilated and there was slight paralysis of the right side.

Dr. Murphy said in his own case he would decline having the operation performed, unless the bones were positively pressing down in the substance of the brain. Goldsmith, of Louisville, says if he could not gouge up the depressed bone, he would not trephine. We may lay down two aphorisms: First, We must be very careful in the management of all wounds of the head. Second, Be very careful in using the trephine.

MONDAY EVENING, May 4th, 1863.

Dr. Fries said he had the pleasure of reporting the patient upon whom he operated yesterday a week ago for fracture of the skull, as doing well. There were no unfavorable symptoms. The paralysis has diminished and he has perfect control of the right arm. His intellect is clear and the wound appears healthy. The Doctor said at some future time he would offer some remarks upon the great fatality reported to follow the use of the trephine, as these reports do not correspond with his own experience.

Dr. Murphy said he based his opinion entirely upon statistics. Guthrie, Erichsen, Pirrie, Longmore, Stromeyer, Macleod, all speak of the great fatality following the operation. Statistics show but one recovery in five cases after trephining. Guthrie says in simple fractures of the cranium, without any unconsciousness or symptoms of compression, do not operate.

Dr. Fries said he had lost but two cases in this city after trephining, and he had trephined twenty-five times. One of these fatal cases he thought was due to the delay in operating. The patient lay three days and nights before being operated upon. He thought the better plan was to operate at once. This man waked up for an hour, then relapsed. An early use of the trephine would have been more favorable. He said as a general rule he would not operate, unless there was depression; but if there were indications of effusion, even if no depression, he would operate. He had done so, found a coagulum and saved his patient.

Dr. Murphy said this was in contradiction of the opinion of all surgeons in regard to the use of the trephine for the cure of epilepsy. Dr. Gross says nothing but fatality follows the operation in such cases. Dr. Blackman has abandoned the use of the trephine for the cure of epilepsy. And in the opinion of all surgeons, the use of the trephine for the cure of epilepsy is under the shade.

Dr. J. B. Smith said in 1845 while he was resident physician in the Commercial Hospital, a farmer between twenty-nine and thirty years of age, came into the house to be cured of epilepsy. When he was sixteen years of age his skull was fractured, producing depression. His health was good. Dr. Mussey said he never had a patient in a more favorable condition for a good result. He operated upon him, and the man died in four days.

Dr. Gans said he was at St. John's Hospital the other day, when a patient was brought in who was a subject of epilepsy. Dr. Blackman sent him away, refusing to operate, notwithstanding there was a large depression!

Dr. Fries said he had no doubt the statistics were against him; but if a man is governed by statistics altogether, he will make a poor devil in the profession. He will never come to anything. As for himself, he would continue to do as he had done.

Dr. Mount said he knew of two cases Dr. Mussey operated upon for the cure of epilepsy, and both got well. He had operated himself seven or eight times. In one fatal case the fracture extended down to the base of the skull. But in every instance, with one exception, when he operated early the patient got well.

[The continued ill health of Dr. Fries has prevented his writing out the remarks he intended in connection with this case, and he simply dictates as follows:

The recovery of the case was complete. Entire restoration of intellect, and entire recovery of the use of the paralyzed side. The frightful degree of hæmorrhage in this case, notwithstanding the favorable termination, leaves him in doubt as to the proper course to be pursued in such cases as a general rule. In his opinion, in the hands of a timid or inexperienced surgeon, the hæmorrhage would, doubtless, have proven a fatal complication. The removal of so large a portion of bone, two by two and a half inches, directly over the longitudinal sinus, would necessarily be hazardous to the life of the patient under the most favorable circumstances. Even with such an amount of bone deeply depressed, with the usual symptoms attending such a state of affairs, as coma and paralysis, he would again resort to the same operation. Of course, in the absence of these urgent symptoms, he would trust the case to proper general treatment and abstain from an operation.]

Correspondence.

[The following communication from our friend, Dr. CHURCH, Medical Director of the Department of the Ohio, we regard as very interesting.]

Editors Lancet and Observer:—More than two years since, at Bellevue Hospital, I amputated a thigh by what might be called the anterior single flap method. That patient did so well that, upon entering the army, I induced others to assist me in giving the method a more thorough trial, and subsequent experience has been so favorable that I have determined to submit a description of the operation for publication.

Having grasped as much of the soft parts as can be held by the left hand, a catling is passed through above the bone, carefully avoiding the principal artery, nerve and vein. A superior flap is made by cutting *downwards and upwards*, its length being little less than one-third the circumference of the limb—*i. e.*, if the limb is fifteen inches in circumference, the flap should not be more than five inches in length. The flap being drawn back by an assistant, the remaining soft parts on the lower part of the thigh are divided down to the bone by one sweep of the knife, at right angles with the shaft of the bone, as in the circular operation, it only remaining to saw through the bone to complete the amputation. The parts are brought together with sutures and adhesive straps, and the stump covered with a light, or cold-water dressings.

The supposed advantages of this operation are:

That when in coaptation the cut surfaces are confined to the lower half of the limb.

From the above fact the fluids more easily escape.

The vessels and nerves are divided transversely, and can not be drawn over the end of the bone.

The bone is not so apt to protrude.

The cicatrix does not come near the end of the bone, which is covered by a thick cushion of muscles, and other soft tissues.

The stump is better adapted to the purposes of an artificial limb.

I never have yet seen any portion of the flap slough.

For about thirty-six hours after amputation the discharge is very profuse, when it almost entirely ceases.

Should the above assertions prove correct, there is every reason to hope for a more speedy recovery through union by first intention, than in either the double flaps or circular operations. The leg may be amputated by dissecting up the anterior flap, when the operation is completed in the same manner as with the thigh.

Cincinnati, August 5, 1863. WM. HENRY CHURCH,
S V. and Medical Director.

SUBCUTANEOUS HERNIOTOMY.— M. Langenbeck, of Hanover, performs this operation as follows: The surgeon pinches up a fold of skin and makes an opening sufficient to allow the passage of the index finger, the opening being situated a little below and internally to the external ring. With the index, the soft parts which surround the protruding bowel are then detached up to the strictured part. The fibres of the ring are then to be torn with the finger, and, if the hooked finger does not succeed, a hernia-knife may be glided on it, or a blunt hook may be substituted for the knife, to avoid hæmorrhage. The sac is then to be examined, adhesions broken down, and the bowel returned into the abdomen. There must be, in this mode of operating, a great deal of tearing and bruising, and very little certainty as to the parts acted upon.—*London Lancet.*

Reviews and Notices.

The Pharmacopœia of the United States; Fourth Decennial Revision. By authority of the National Convention for revising the Pharmacopœia, held at Washington, A. D. 1860. Philadelphia. J. B. Lippincott & Co. 1863.

At the Convention held at the city of Washington in 1860, the following gentlemen, well known for their ability, scientific attainments and mature judgment on all matters pertaining to the pharmacy of the United States, were appointed to act as the committee of revision of our Pharmacopœia: Dr. Franklin Bache, of Philadelphia; Dr. Edward Squibb, of New York; Mr. Chas. P. Carney, of Boston; Dr. Henry T. Cummings, of Portland; Mr. Wm. Proctor, Jr., of Philadelphia; Dr. Joseph Corson, of Philadelphia; Mr. Wm. S. Thompson, of Baltimore, and Mr. Alfred B. Taylor, of Philadelphia. These eight to act in conjunction with Dr. George B. Wood, of Philadelphia, President of the Convention.

The result of the labors of this special committee is before us in the shape of this little volume. The carefulness of the labors of the committee may be somewhat judged of, when we are told they held "one hundred and nineteen meetings, generally once a week, and performed a large part of their duties through the agency of sub-committees, who worked in the intervals, and made one hundred and thirty-eight written reports."

A Pharmacopœia of the United States is not merely a series of formulæ for the best mode of presenting uniform preparations, but it is for the time a declaration of what the experience of the profession has decided shall be considered its standard officinal preparations. It is, of course, to be expected that the completion of each decennial interval, with the progress of medical science, will bring with it many modifications in the opinions of practitioners as to the value of remedial agents. The volume before us is another evidence that our science has not yet reached a state of perfection.

In the list of the *Materia Medica* fifty-five medicines have been introduced and twenty-six dismissed. The preparations have been increased by one hundred and eleven additions, and twenty-seven dismissed.

We observe a few changes in both Latin and English officinal names. *Calumba* is substituted for *Colombo; Pulvis Ipecacuanhæ Compositus* for *Pulvis Ipecacuanhæ et Opii; Spiritus Ætheris* Nitrosi instead of *Spiritus Ætheris Nitrici*, the committee assuming that the sweet spirits of nitre does not contain *nitric* acid, but *hyponitrous* or *nitrous* acid.

The arrangement of the work is as follows: *Preliminary Notices*, as of weights, measures, temperature, specific gravity, percolation, fineness of powders, etc. *Materia Medica*, giving a list arranged alphabetically. *Preparations*, arranged also in alphabetical order; thus, under the head of *aceta*, we have formulæ for acetum colchici, acetum lobeliæ, acetum opii, etc. In like manner, we have extracts, preparations of mercury, infusions, mixtures, tinctures, unguents, trochees, etc., etc.

In the latter part of the book we have several tables which add to the convenience for reference, and increase the completeness of the little book; thus, a table of medicines introduced into the materia medica, another of those dismissed, new preparations, preparations dismissed, tables indicating the changes in officinal names, in the position of medicines, etc.; a full index completing the whole.

Following next in order, we take it for granted we shall now have a new edition of the United States Dispensatory, conforming to the modified Pharmacopœia, for which we shall now look forward with interest.

This little volume before us is of great value to the practical pharmaceutist and dispensing druggist. The country practitioner will also find it an important office companion, and all interested in medicine directly or indirectly will profit by its perusal.

For sale by Robt. Clarke & Co. Price $1.00.

Manual of Instructions for Military Surgeons, on the Examination of Recruits and Discharge of Soldiers: with an Appendix containing the Official Regulations of the Provost-Marshal General's Bureau, and those for the formation of the Invalid Corps, etc., etc. Prepared at the request of the United States Sanitary Commission, by John Ordronaux, M.D., Professor of Medical Jurisprudence in Columbia College, New York. New York: D. Van Nostrand, 192 Broadway. Price, $1.50.

A Manual of Instructions for Enlisting and Discharging Soldiers; with special reference to the Medical Examination of Recruits, and the Detection of Disqualifying and Feigned Diseases. By Robert Bartholow, M.D., Assistant-Surgeon U.S.A., Surgeon in charge of McDougal General Hospital, Professor of Military Medical Jurisprudence, Army Medical School. Adopted by the Surgeon-General for issue to Medical Officers of the Army. Philadelphia: J. B. Lippincott & Co. 1863. Price, $1.25.

The appearance of these two books is exceedingly opportune. With the exception of the small manuals by Tripler and Henderson, the profession has had no works on enlisting and discharging soldiers.

Tripler's Manual, though adapted to the regular army as constituted before the present rebellion, is not full or complete enough for the present grand army of the country. A large number of the physicians who have entered the army have given but little attention to the foreign literature of military surgery, and particularly to that concerning the enlisting and discharging of soldiers.

Again, many good practical physicians who have entered the army as surgeons have been unequal to the difficult task of deciding the question of discharges, and have in consequence discharged a great many who have feigned their various diseases. The want, then, of books of this character has been urgent.

Dr. Ordronaux tells us in his preface that he prepared his Manual at the solicitation of the United States Sanitary Commission. He dedicated it to the Surgeon-General. He is not engaged, we believe, in active practice. His book is largely a free translation of the French Code.

After carefully reading both of these Manuals, we think that by Dr. Bartholow is to be preferred. While it is fuller, it bears on every page the evidence of a careful observer and the results of an extensive experience in the army. It will be read with great benefit and satisfaction by every physician. There is no physician, indeed, who has not been called on to give opinions concerning the health of some soldier recruited in his neighborhood. Great vagueness and uncertainty is observed in the written opinions of many concerning the health of soldiers at home on furloughs. We have known physicians to be imposed on to such an extent by soldiers on furlough that they have repeatedly written their opinion recommending their discharge. A careful perusal of Dr. Bartholow's book will prove of great assistance to such in detecting feigned diseases. The work was prepared at the suggestion of the Surgeon-General, to whom it is dedicated. There are several opinions expressed here and there through the book on different subjects which are not proven. Dr. B. believes, and so expresses himself, that owing to the ignorance of surgeons in diagnosis, and the skill of malingers, many soldiers have been discharged. He doubts the existence of so many cases of phthisis and disease of the heart, for which discharges for the former were granted in 1564 cases in a series of 10,446, and for the latter in 639 cases in 10,446 discharges. We believe, from actual observation, that both of these diseases organic in character, have been uncommonly frequent, especially among Western troops. The book will, however, prove of great benefit, particularly to the young army surgeon.

We can not refrain from expressing our surprise in finding a glossary of medical terms appended to the book. Dr. B., we imagine, entertains a very poor opinion of the elementary education of the army surgeons, or he would not certainly have given a glossary of the most ordinary medical terms. He tells us that he was induced to add the glossary for the benefit of recruiting officers. A recruiting officer can not enlist a soldier, according to the regulations, until he has been examined by a surgeon. Of what benefit, then, is the glossary to a recruiting officer?

For sale by Robert Clarke & Co., Fourth Street.

A Treatise on Hygiene, with special reference to the Military Service. By W. A. Hammond, M.D., Surgeon-General U.S.A., etc., etc. Philadelphia: J. B. Lippincott & Co. 1863.

This is a fine volume of five hundred and ninety-six pages. The work was prepared more especially for the military service. Beyond this, the general reader, or the civil physician, will not find much that is new. The subject is discussed in three sections.

In Section first, the subject of the examination of recruits is considered in two chapters: Chapter I. being taken up with a consideration of the general qualifications of recruits; Chapter II., special qualifications and disqualifications of recruits.

In Section second, under the general head "of the agents inherent in the organism which affect the hygienic condition of man," we have Chapter I. on Race; Chapter II. Temperaments in General; Chapter III. Particular Temperaments; Chapter IV. Idiosyncrasy; Chapter V. Age; Chapter VI. Sex; Chapter VII. Hereditary Tendency; Chapter VIII. Habit; Chapter IX. Morbid Habits; Chapter X. Constitution.

In Section three, the agents external to the organism which act upon the health of man are considered in the following chapters: Chapter I. The atmosphere; Chapter II. The accidental or nonessential constituents of the atmosphere; Chapter III. Physical properties of the atmosphere; Chapter IV. Temperature; Chapter V. Light; Chapter VI. Electricity; Chapter VII. Water; Chapter VIII. Soil; Chapter IX. Locality; Chapter X. Climate; Chapter XI. Acclimation; Chapter XII. Habitations; Chapter XIII. Hospitals: Chapter XIV. Principles of hospital construction; Chapter XV. Field hospitals; Chapter XVI. Lighting hospitals; Chapter XVII. Heating hospitals; Chapter XVIII. Ventilation of hospitals; Chapter XIX. Barracks; Chapter XX. Camps; Chapter XXI. Food;

Chapter XXII. Alimentary principles ; Chapter XXIII. Physiological and sanitary relations of food ; Chapter XXIV. Animal compound elements ; Chapter XXV. Vegetable compound elements ; Chapter XXVI. Necessary food ; Chapter XXVII. Alimentation of the soldier ; Chapter XXVIII. Clothing ; Chapter XXIX. The hygienic relations of clothing with the several parts of the body.

For sale by Robert Clarke & Co. Price $5.00.

Morbus Coxarius: Article I. a Clinical Lecture; Article II. Objections to its treatment in the advanced stages by extension, unless preceded by tenotomy; illustrated cases. Reprinted from the *American Medical Times.* By Lewis A. Sayre, M.D., Surgeon to Bellevue Hospital, etc.

We are indebted to the author for this little *brochure* on a disease of frequent occurrence. To Dr. Sayre the profession is under obligations for a correct pathology of morbus coxarius, and consequently for a successful treatment. The doctrine that the disease "never arises on any individual from a purely idiopathic or constitutional cause" is well proven. The description and treatment of the disease is given in a brief, yet clear and graphic style. The differential diagnosis is well described. Dr. Sayre has had very gratifying results in the treatment of the disease. We advise our readers who are not subscribers to the *American Medical Times,* to send to Dr. Sayre for a copy of this very valuable *brochure,* if for nothing else than to assist them in the diagnosis of diseases of the hip joint. Dr. Sayre justly enjoys a high reputation for the treatment of the disease.

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Editor's Table.

The Surgeon-General in a New Order.—When we pronounced Circular No. 6 unwise, unjust and untrue, we only echoed the opinion of every good physician. That the Surgeon-General had no facts to justify him in issuing it, the Cincinnati profession, in its preamble and resolutions, fully proved. We have conversed with many surgeons, and a half dozen Medical Directors, and have yet to hear one say that calomel or tartar emetic had been abused,—much more even, that they were used in the army very sparingly.

The Circular sufficiently demonstrated that the Surgeon-General was hasty, if he had not been waiting for a slight pretext to issue the order against calomel. The difference now between the Surgeon-General and the Eclectics and Botanics is so slight that the profession in the West can not discover it. He has done a great injury to his profession, and has published a statement which is false. Puffed up with his promotion, and believing that he was the only man in the country qualified for his place, he has attempted to dictate to his profession; and finding that he has undertaken a little job by no means easy of execution, he now comes out and attempts to flatter "the more eminent members of the medical profession" into some kind of a support of Circular No. 6, by presenting a series of questions to them which do not touch the subject at issue, and which as a statement is as false as Circular No. 6. He may get "the more eminent members" of New York city, especially those of the Sanitary Commission, to endorse him, but we feel assured that the profession of the West are determined that he shall be removed.

But let us introduce the last circular on calomel and tartar emetic:

SURGEON-GENERAL'S OFFICE, WASHINGTON CITY, D.C.,
June 12th, 1863.

DEAR SIR:—Desiring to obtain the opinions of the more eminent members of the medical profession relative to the indiscriminate use of calomel and tartarized antimony, I have the honor to request that you will answer the following questions:

1st. To what extent do you prescribe calomel and tartar emetic in your practice?

2d. Do you regard these agents as indispensable in the treatment of disease?

3d. In view of the facts that a large number of the medical officers of the army are young and inexperienced, and that soldiers in the field can not be placed beyond the influence of atmospheric vicissitudes and exposure whilst undergoing medical treatment, would you recommend that the medicines in question be issued to army medical officers, except, as at present, upon special requisition?

4th. Do you or do you not think that more harm than good has resulted from the use of calomel and tartar emetic as medicines?

It should be stated that the following mercurials are at present on the Supply Table, viz:

Hydrargyri chloridum corrosivum;
Hydrargyri iodidum flavum;
Hydrargyri oxidum rubrum;
Hydrargyri pilulæ;
Hydrargyri unguentum;
Hydrargyri nitratis unguentum;
Pilulæ catharticæ compositæ;

and that it is provided by paragraph 13, of Circular No. 7, dated Surgeon-General's Office, May 7, 1863, which contains the Supply Table, and which refers to the manner of obtaining medical supplies, "that it is not the design of the Department to confine Medical Officers absolutely to that table, either in variety or quantity, but only to establish a standard for their guidance in making requisitions for supplies, leaving individual preferences to be indulged at the discretion of the Medical Director or Surgeon-General. Neither is it supposed that the quantities of the table will always meet the necessities of unusual emergencies, as during epidemics, or in unhealthy seasons and localities; and medical officers who allow their supplies to be exhausted through any such contingencies, without timely notice of their approaching necessities, will be held to strict accountability."

I am, sir, very respectfully, your obedient servant,
WM. A. HAMMOND, Surgeon-General, U.S.A.

We beg our readers to look closely at the language of this epistolary order. It purports to be directed to the more eminent members of the medical profession, and yet it has been sent to the Medical Director of each army corps. We do not pretend to say that these latter named gentlemen are not eminent. We are only curious to know why Dr. Hammond addresses them in the familar language of an ordinary letter. In this epistle he wishes opinions relative to the "indiscriminate use" of calomel and tartar emetic. In Circular No. 6 he stated that calomel "has so frequently been pushed to excess by military surgeons as to call for prompt steps by this office to correct the abuse."

In the first order he published the statement that calomel was used to such excess in the army, that he was forced to strike it from the Supply-Table. He issued the order "with the more confidence as modern pathology has proved the impropriety of the use of mercury in very many of those diseases in which it was formerly unfailingly administered." In this last epistolary order it seems he is not so sure of his modern pathology; he does not, it is evident, feel safe with the reports of the medical and sanitary reports on the abuse of calomel and tartar emetic.

Who is it that will not say freely that he is entirely opposed to the indiscriminate use of calomel and tartar emetic, as he is to the indiscriminate use of all remedies?

"1st. To what extent do you prescribe calomel and tartar emetic in your practice?"

Dr. Hammond is determined to get evidence to support Circular No. 6, or he would never have asked such a question. All good physicians will answer that they prescribe it when they believe it is indicated. The Eclectic quacks will, no doubt, answer it satisfactorily.

"2d. Do you regard these agents as indispensable in the treatment of disease?"

We are astonished at this question. Why does he wish to know whether calomel and tartar emetic are indispensable agents? Has he not already decided in Circular No. 6 that they are not? But what agents are indispensable? In what doses? Would it not be well for the Surgeon-General with his "modern pathology" to answer this question. Probably, in the second edition of Hammond's Hygiene, *we shall find a chapter added* on this question.

In the third question he says, "a large number of the medical officers of the army are young and inexperienced." What a eulogy on the staff of the army! Were all those who passed the Boards appointed by Dr. Hammond young and inexperienced? What will the quacks and slanderers of the military surgeons say when they read this third question? They will chuckle over the evidence so pointed in favor of all they have said against the medical staff. Dr. Hammond does not care how his brother officers may suffer in reputation, so as that he can, by fair or foul means, obtain evidence to support Circular No. 6. He is well aware that the profession is moving against him, and that nothing less than his removal will satisfy it.

Again, in this same question he says, "that soldiers can not in the field be placed beyond the influence of atmospheric vicissitudes and exposure whilst undergoing medical treatment." Let us hear the Surgeon-General in his new book on Hygiene. In Chapter XV. he says: "The best field hospitals, both for *summer and winter, are tents. Even in the coldest weather, these can be made exceedingly comfortable by the small camp-stoves which are issued.*" We leave our readers to comment on the inconsistency of Dr. Hammond, merely observing that our respect for any man who can contradict himself so grossly, is greatly lessened. Has he lost his memory? Does he forget what he writes? It is impossible. The conviction forces itself on us that he is trying to make his case, and is no way particular how he does it.

In the last clause of this same question he says: "Would you recommend that the medicines in question be issued to army medical officers, except as at present upon special requisition?" Dr. Hammond states what he knows to be untrue in this latter clause. In Circular No. 6 the medicines are stricken from the Supply-Table, and Medical Directors are forbidden to approve any further requisitions for them. We know that Medical Directors will not approve a requisition of any kind for either calomel or tartar emetic. Why, then, does he attempt such wilful deception "of the more eminent members" of the profession, whose candid opinions he seeks? Does it not look very much as if he designed so to do?

"4th. Do you or do you not think that more harm than good has resulted from the use of calomel and tartar emetic as medicines?"

It is evident he is seeking facts and opinions to write a book, it may be, on modern pathology or therapeutics. He should go over to the Eclectics *et id omne genus*, where he belongs. They will answer this question as the Surgeon-General desires. Seriously, he might as well have asked, Do you or do you not think that more harm than good has resulted from the use of opium, alcohol and blood-letting? We are not disappointed with the questions, when we know that this Dr. Hammond carried a soldier badly salivated to the President a few weeks ago, that he might see the abuses of calomel. Baser or more disgusting quackery is not to be found among the traveling mountebanks or steam doctors.

When Dr. Hammond was on duty at Mackinac some few years ago, he stated to a medical gentleman of this city, that he believed calomel and tartar emetic should never be used. We can understand the questions in this last Circular with this fact before us. He tells us that several preparations of mercury are at present on the Supply-Table. Why should they be retained, if the new "modern pathology" is true? In all cases where calomel is contraindicated in diseases of soldiers, all of the other preparations are contraindicated. Any or all of them are liable to abuse. The Surgeon-General did not feel himself strong enough to cut all off. In one word, he dared not do it. In the quotation made from the Supply-Table, he gives us to understand that "it is not the design of the department to confine medical officers absolutely to that table, either in variety or quantity, but only to establish a standard for their guidance in making requisitions for supplies, *leaving individual preferences to be indulged at the discretion of the Medical Director or the Surgeon-General.*" How can the individual preferences of surgeons for calomel in any case be indulged, when it is stricken from the Supply-Table, and all discretion is taken away from Medical Directors by Circular No 6? Nay, more: they are positively forbidden to approve a requisition for it.

The whole truth is, that the Surgeon-General has had a fixed purpose to carry out in the army certain notions of therapeutics, and has been seeking some pretext since his advent to office to accomplish his purpose. The claim set up for him by some one or two journals, that it is proper and right for him so to do, is not acknowledged by the profession. He has neither the age nor the clinical experience entitling him to any such claim. He shall not assume to himself to dictate to his professional brethren, even to those whom he can order what remedies they shall use. We care not for his acknowledged scientific acquirements, we maintain that he has done the profession a great wrong, and what makes it worse, he persists in adding insult to injury. He must be removed. The profession of the West are now moving, and are determined in their purpose.

His official organ, the *American Medical Times*, is forced to condemn his course in issuing Circular No. 6 previous to this last order. The editors of the *Times* have been placed in a difficult position in regard to the Circulars of the Surgeon-General. Several hundred copies of the *Times* are sent weekly, by order of the Surgeon-General, to each military hospital and (we believe) to the surgeon of each regiment. The book of Dr. Smith, one of the editors, on Surgical Operations, is on the Supply-Table. It is, therefore, not strange that the *Times* was forced into some kind of a defense of the Surgeon-General.

The *Times* very truly says, "The verdict of the vast majority of the practitioners will be emphatically expressed in favor of these remedies" (calomel and tartar emetic.)

The *Times* favors the establishment of a military medical school at Washington City, with Dr. Hammond as the professor of modern pathology, judging from the following sentence: "The real point at issue is embraced in the third question, and no one can answer that intelligently who is not practically familiar with the diseases of soldiers, and the modifying circumstances which surround them."

Accordingly, the professorships of materia medica, practice, and "modern pathology" in the several schools should be vacated, and surgeons of the army placed in them. This would be the only proper and certain way to get men qualified to enter the army as surgeons, and obviate the present evil committed by the "young and inexperienced" surgeons.

The *Times* again says, that "upon the answers of the surgeons o the army to those inquiries we shall rely, and not upon those elicited from civil practitioners, whatever may be their eminence." This is a virtual acknowledgment that even the professors in the New York Schools are wholly unfit to teach the therapeutical uses of remedies.

How can the editors of the *Times* rely on "the answers of the surgeons of the army" to the questions of this latter Circular of the Surgeon-General, when he makes the broad and decided statement in the same Circular that "a larger number of the medical officers of the army are young and inexperienced"? It is more than probable that the editors of the *Times* have a higher respect for the qualifications of the surgeons than the Surgeon-General. We shall be glad to read the answers of the Medical Inspectors. We have heard some of them deliver their opinions, not only of the Circulars, but of the course of the Surgeon-General.

The truth is, the more that is said by persons and journals in defense of the Surgeon-General only tends to make his course appear worse and more offensive. We are glad to know of the feeling existing in the profession on the subject. It matters little what shifts and side issues he or his supporters may resort to in his defense, or how many soldiers suffering from the bad effects of calomel he may exhibit to the President, the profession in the West is convinced that he can not be permitted to occupy his office, as he does not represent either the science or the liberality of the legitimate medical profession.

The regular medical profession claims the right to use all agents, regarding them as potential and relative. Empirics regard medicinal agents as specifics and poisons. Dr. Hammond has attempted to degrade his profession to the level of this latter class. He is the representative of the medical profession, and must, therefore, answer to it. We are glad at the general and almost unanimous opinion of the profession. He must be removed.

Nostrum Advertising—The Western Christian Advocate.—Our article of last month on *clerical quackery* has called out a brief rejoinder from the editor of the *Advocate*. Having thought fit to notice the matter at all, we are certainly free to say the view taken by Dr. Kingsley is by no means equal to what we should expect from his reputation for candor. It is neither frank nor ingenuous. It reads with very much of the flippancy of parties who are making a good thing of their contract and are disposed to hold on. It commences by saying we endeavor to get "*spunky* over the fact that the *Advocate* had advertised certain medicines," etc. We simply disavow the feeling imputed. We made a *protest*, on behalf of our large body of Methodist medical friends, who have a warm attachment for the *Advocate*, as for all the institutions of their Church, but feel aggrieved at the nuisance we have indicated. This protest has been again and again made verbally by Methodist physicians to the conductors of the *Advocate* without effect. We did not expect it would now avail: there is too much Ephesian Diana in quack nostrums for that as yet; but we felt willing to bear our testimony against the influence the *Advocate* was wielding in this direction.

But the Doctor proceeds: "We do not pretend to know the value of a medicine or of a ware introduced into our advertising columns," etc. We presume a slight transposition of the sentence would express the truth more exactly—perhaps the printer made a typographical error. It should read, "We *pretend* not to know," etc.; for the truth is, that the editors of that paper and the agents "*do know*" perfectly well that the long list we gave in full last month are miserable, swindling cheats; they *do know* perfectly well that those who purchase them are *throwing* their money away for that which is worse than worthless; they *do know* very well that those who are induced to put credence in their value as curative measures are not only defrauded, but their lives and health endangered.

Besides, we assert that it is the business of those who control a religious family newspaper, to see to it that their advertising matter is not exceptionable. It is *not* sufficient that they are simply ignorant as to anything hurtful or vicious in the "medicine or ware" thus advertised.

In the present case the editors seem to be under the impression that, having disavowed responsibility, they may with impunity insert any character of matter in that department that may be presented. It is a very innocent matter with them. "Here, my hundred thousand readers, is a remedy. We don't *vouch* for it, my good friend, but there is their card. You may do as you please about *reading* it. You needn't read our advertisements at all, unless you see fit; but if you do, you will see what they *promise*." Dr. Kingsley has too acute and logical a mind not to see the miserable absurdity of his position.

But our *Advocate* grows facetious before it concludes. Clerical wit is something famous, and we have a small quantity of it administered on the present occasion,—perhaps not quite equal to the wit of Dean Swift, but still wit. "We have often advertised," says the *Advocate*, "by way of notice, the *Lancet and Observer*, without supposing our readers would hold us responsible for the correctness of all its theories. We should advertise the card of the editor even, if he desired it, without ever thinking ourselves responsible for every dose of medicine he may choose to give a patient." We say this will do moderately well as wit, but is scarcely up to the mark of a high-toned reply to a serious and good tempered complaint against a prominent feature of that paper. When we have heretofore received the courtesy of a complimentary notice in the columns of the *Advocate*, we suppose the editor to have said in substance about this: "The *Lancet and Observer* is devoted to the interests of legitimate medicine. It is not our business to be posted in medical theories, but its editors are respectable physicians, and the character of the journal is honorable; we can, therefore, safely commend it to any one wishing a regular medical journal." Now, if anybody will point out to us the parallel between such claims as those of "*Sanford's Liver Invigorator*," or "*Roback's Stomach Bitters*," or "*Rev. Bro. Harrison's Great English Remedy for Consumption*," paraded week after week in the *Advocate*, and such a notice of a legitimate medical journal, or even the professional "card of its editor," we will acknowledge our own stupidity in the whole matter, and respectfully beg pardon for all this agitation.

In conclusion, we simply repeat the points of our complaint, the complaint of a large number of medical readers of the *Advocate* :

The advertising department of the *Advocate* is almost exclusively given up to the cards of prominent quacks nostrums, the bare list of a single week's issue, as given in our last number, making quite a formidable catalogue.

The editors and publishers of the *Advocate* are well aware that the claims of these nostrums are miserable cheats.

Although disavowing all responsibility, it is patent to every thinking man, that the influence of the *Advocate* is to a large extent transferred to the interests of this sort of quackery, and hence it is venders can so well afford to pay largely for the space thus occupied in the announcement of their wares.

The readers of religious papers do not expect to find therein an undigested mass of advertising matter; and no matter what "female pill" cautions you may announce, they therefore presume that to a certain extent the character of the paper vouches for the safety, if not utility, of the nostrum. We know this to be true in fact, whatever may be the intention of those who control it.

Finally, we very well know that many respectable medical men refuse to subscribe for or read the *Advocate*, simply on account of this source of grievance. We do not know how far this is an argument with our friends of the *Advocate*. Perhaps in their turn they may "get spunky," and fancy that if doctors become disgusted with their pandering to quackery, the disgust is only mutual, and therefore they will continue, as heretofore, to look out for the most money. At any rate, we believe we have done our duty, and in our honest way expressed an honest, legitimate conviction of impropriety.

Gastrotomy.—We have received the report of a case of extirpation of a large abdominal tumor by Dr. John O'Reilly, of New York city. The tumor was very extensive, having attachments to the third and fourth lumbar vertebræ, uterus, etc. The case is reported chiefly as an additional evidence of the correctness of the views of Dr. O'Reilly of the value of opium as a therapeutic agent, especially as a controlling remedy in threatened peritonitis. After the patient was removed to her bed, she was ordered two grains of opium, and additionally two grains in half an hour, and two grains every third hour *during the night.* She was kept under the influence of opiates in full doses for seven days, at the end of which time she had every appearance of a speedy recovery. The abdomen was soft and relaxed, and there was no pain or tenderness on pressure. The case terminated fatally, however, as the result of an inordinate dose (℥iij.) of cream of tartar, taken contrary to orders, which produced rapid and exhausting diarrhœa, ending in fatal collapse.

Medical Department of Lind University.—By the last number of the *Chicago Medical Examiner* we observe with pleasure that the next annual course of instruction in this institution is to be given in a new edifice, which is fast approaching completion. We also notice that, in consideration of the fact that the trustees of Lind University change the title of that Institution to "*Lake Forest University,*" it becomes necessary to make a new name for the medical department. It is, therefore, to be known hereafter as *Chicago Medical College.*

—— Our readers will not fail to have noticed that every body connected with the army has been thanked, excepting the surgeons. The different Generals, Colonels, Captains, Quartermasters and Commissaries have each and all received marked approbation from the President and the different States. The newspapers have been filled with eulogies of every one but the Surgeons. The rule has been to censure them, to abuse and slander them. We fail to find in the reports of several Generals any notice of their Medical Directors. It is a common thing for a Brigadier to make his report, and omit even a mention of the Surgeons. The Sanitary Commission, for some time after its organization, indulged itself in hearing the reports of its agents censuring the Surgeons.

The Surgeons are the only officers who have been examined prior to their appointment, and are the only class who have been roundly, continuously and unjustly abused. When we come to inquire into the cause of this general abuse, it is not difficult to understand it. The head of the medical staff, the Surgeon-General, has not been watchful of the honor or the good name of his subordinates. We know he has a poor opinion of them. In his recent work on Hygiene and his late notorious Circulars, he has pronounced that a large number of them are "young and inexperienced." To be a young physician is, with the public, and its representative the newspaper, to be a man wholly unqualified, and worthy of all manner of bad treatment.

Lately the Surgeon-General found time to write a letter of thanks to the Christian Commission for its labors on behalf of sick and wounded at Gettysburg. Every one knows how often he has complimented the Sanitary Commission. Indeed, so much has he complimented the Sanitary Commission, that many innocent people believe firmly that if it was not for the Commission the soldiers would perish either from wounds or sickness, or the bad treatment of surgeons.

Is it not time that the Surgeon-General, so rich in Circulars, should issue one to the people of the country, showing what the surgeons of the army have done? If he had issued such a Circular, complimenting the surgeons for their faithfulness and hard work, instead of the late one to the Christian Commission, it strikes us that he would have not only added honor to his position, but he would have performed duty to a deserving class of gentlemen. We venture that no six members of this Commission are as deserving of mention as any one of the assistant-surgeons who followed his regiment into the great battle and succored the wounded braves. For his subordinates and professional brethren, he has no official recognition or word of sympathy. He is ready, however, at a moment's notice to issue a Circular pronouncing them "young and inexperienced," and withdrawing from them certain remedies. The time is not far distant, we hope, when full justice will be done to the medical staff of the army. When it is written, we do not think it will be by the present Surgeon-General.

The Code of Ethics—Consultation with Quacks.—An esteemed correspondent proposes the following, and desires an answer:

"Does the Code of Ethics warrant the expulsion of a member of a respectable medical society, for knowingly consulting with a man claiming to be of the regular profession, but in the habit of frequently consulting with Eclectics and Botanics?" and adds that within his knowledge there are certain medical men regarded as respectable, and ranking as legitimate practitioners, who are in the habit of holding consultations with quacks. What position are they to take, and how are those to be regarded who affiliate with them, knowing these facts?

The language of the code is not precise to this definite point, though we presume there is no difference of opinion amongst *loyal* men as to the spirit of the law. Article IV. of the Code provides for consultations; and while making generous provision for true men within the ranks of the profession who do not hold the parchment of a regular medical school as the evidence of their professional abilities and acquirements, it expressly says, "No one can be considered as a regular practitioner or a fit associate in consultation, whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology and organic chemistry."

No matter what the rank and attainments of a physician otherwise, if he condescends to consult with a quack, he places his professional *morale* on the same platform, and is henceforth to be regarded as the equal and companion of quacks, and should be duly handed over to their tender mercies. Having outraged professional etiquette, let him suffer the penalty.

"*What is the Modus Operandi of Medicines?*"—Dr. John O'Reilly is a very indefatigable worker. His ideas are generally original, and display ingenuity and thought. With such qualities, we can readily enough forgive hobbies or even fallacies. Thinkers beget thought, and are a useful part of creation, even if they don't think right. The object of the little pamphlet before us is to sustain the proposition that "*medicines produce their effects by their action on the organic nervous system,* through the agency of the blood."

We think Dr. O'Reilly falls into the mistake of all those who undertake to explain the *modus operandi* of medicines by any single interpretation or single law. Nevertheless, his reasoning is specious, and his illustrations to the point. Dr. O'Reilly is a special friend of the organic nervous system; thither are directed all his reasonings. We thank him, however, for one thing. He very clearly upsets the ammunition of those quacks who quote the Bible to demonstrate that "*the blood thereof is the life thereof.*" We think Dr. O'Reilly is correct when he asserts that vitality has its seat in the organic nervous system.

To illustrate his views of the manner in which remedies act, take the following, which do not fully do justice to his argument, but serve as a thread to his style of thought:

> "It is not necessary to introduce agents always into the blood to cause dilation or contraction of the blood-vessels; as, for instance, when a little brandy is thrown into a person's eye it will instantly become blood-shot, the capillary arteries dilate, and allow blood to enter them. This condition of the arteries can not be attributed to absorption of the brandy into the blood, inasmuch as the vessels of the other eye are not affected, which they should be if it depended on absorption of the brandy into the blood. The brandy stimulates the organic nerves of the conjunctiva. When strychnine is sprinkled on a blistered surface after the removal of the cuticle, the muscular fibres contract at once; this can not be attributed to absorption of the

strychnine into the blood, inasmuch as the other muscles do not contract, which they should do if the condition of the muscles depended on absorption of the strychnine into the blood ; the strychnine stimulates the organic nerves of the abraded surface to contract, spasmodically. When concentrated prussic acid is placed on the tongue of a rabbit, it kills the animal by its sedative action on the organic nervous system before it can be absorbed, precisely as a blow on the semilunar ganglion kills by the shock it gives the organic nervous system, thus expelling life from its abode in the organic nervous system.

"When salt is placed on the web of a frog's foot, it is followed by increased vascularity of the parts to which the salt is applied ; but as increased vascularity is not observed to take place all over the frog, it follows, the vascularity is not the result of absorption, but the local application of the salt, which acts as a direct stimulant on the organic nerves of the part.

"When a blister is applied, the cantharides stimulate the organic nerves of the surface to which the blister is applied, and is followed by the effusion of serum ; if the action of the cantharides depended upon the absorption of the cantharides into the blood, then the whole surface should be vesicated. The cantharides stimulate the organic glands, and increase their activity of secretion. . . . .

"If life is located in the organic ganglions, then it follows that life must be located in the organic nervous system. If organic nerves are in the coats of the arteries, then it follows that life must be located in the organic nerves which supply the arteries. It has been stated by Professor Dalton, that too much importance is attached to the organic nervous system, as regards the operation of medicines ; but if the statements I have made are true, and I think their truth can not be questioned, it follows that all the operations of medicinal agents for good or evil, depend on their action on the organic nervous system when introduced into the blood. When poisons are introduced into the blood by the lacteals and lymphatics in the intestinal canal, or by the lymphatics on the surface of the body, or by the process of inhalation, the action is all the same—they destroy life by destroying vitality in the organic nervous system.

"Blood-poisoning is a vague term, signifying that the blood has been poisoned, but gives no explanation or idea how the poison causes death. The blood carries the poison and communicates it to the organic glands at the termination of the arteries.

"To illustrate the truth of this explanation, it is only necessary to call the attention to what happens when arsenic is applied to a cancerous ulcer on the lower extremity. The arsenic is absorbed by the lymphatics, it is carried into the venous circulation to the right side of the heart, to the lungs, to the left side of the heart, and by the aorta, its branches, ramifications, and capillaries, to all the organic glands wherever located. The organic glands of the stomach become imbued with the poison ; inflammation of the mucous membrane of the stomach is the result, and symptoms of poisoning by arsenic present themselves.

"When Fowler's solution is given in a case of eczema, it is taken up by the lacteals and lymphatics in the intestinal canal, passes into the venous circulation, next into the arterial circulation, is given off to the organic glands on the surface of the body, and changes the diseased action of the organic glands, sometimes causing them to assume a healthy action."

International Congress of Ophthalmology—Dr. E. Williams.—The last issue of the *Amer. Journ. of Ophthalmology* gives the proceedings of the International Congress, held some time since in Vienna. Our copy of that excellent journal failed to come to hand, and we are indebted to the *Philadelphia Reporter* for the following extracts, in which our esteemed friend and neighbor, Dr. Williams, is presented in complimentary, but only due light. We reproduce them for their practical remarks upon several important topics.

"It is with especial pleasure that we publish an extract of these notes of Dr. Williams, the only representative of North American science at the Congress. They show, in every detail, the clever observer, well posted up in regard to the latest acquirements of ophthalmological knowledge—a praise which we, unfortunately, can but rarely confer upon the generally meagre and unscientific articles which find, here and there, their way into the columns of our medical periodicals.

"*Occlusion of the Lachrymal Sac.*—In cases of fistula, or tumor with considerable stricture, or total atresia of the nasal canal, Dr. W. performs the operation by obliteration of the sac. The method of Desmarres, of cauterization with the red-hot iron, he has quitted, and now uses the nitrate of silver, which has the advantage of causing less fright to the patients. He opens the sac largely, and introduces pieces of nitrate of silver, which he allows to dissolve; one is placed in the most elevated, another into the deepest part of the sac, and these applications are repeated until the cavity is closed up. Several weeks are necessary for that; four or five usually suffice. It must be taken care not to cauterize the skin, and that the liquid does not enter the eye by the lachrymal ducts.*

"Dr. W. did not try to close the canalicula, inasmuch as this practice would lengthen the treatment, and because he thinks it is not yet proved that the passage of liquids retards the obliteration of a cavity or a fistula.†

"The results of the complete occlusion are very good; the patients are greatly relieved, and most of them not at all, or but little disturbed by tearing.

"*On Inoculation of Blennorrhoic Pus as a Therapeutic Agent.*—Dr.

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* We can not see how this is very well to be avoided.—Ed.

† We have, since long, been in the habit of using the nitrate of silver, as we have seen at Graefe's clinic, for the obliteration of the sac, but failed in one case to effect it. We found that the lower canaliculum, which we believed to be closed by the introduction of a silver wire covered with a layer of nitrate of silver, was yet opened, and attained our object by closing it. The upper canaliculum needs not to be closed. The question on the closure of the canalicula, therefore, we must consider yet as an open one.—Ed.

Williams states, that since the details on the treatment of pannus by this agent were given by Mr. Warlomont, in 1854, he has used it here and there, but always after having failed by all other methods.*

"In all, he treated that way twelve patients, ten of which were inoculated on both, two on one eye. All had granulations of a very obstinate nature, and frequent recurrences of strong inflammation. Of the ten, patients inoculated on both eyes, six were perfectly and definitely cured, without any accident. One had a small, insignificant ulcer on one cornea, but was also cured. Seven, therefore, may be considered as radical cures. The three others had grave ulcerations of the cornea. A little boy, emaciated and scrofulous, had a perforation of the cornea on one eye, with consecutive conicity of the cornea, and very imperfect sight. His other eye was cured.

"The second case was also a little boy, with strongly pronounced scrofulous diathesis, who had suffered for eight months of strong granulations and keratitis, with considerable photophobia. His eyes were considered lost by Dr. W., and the inoculation performed to relieve him from his terrible pain, and perhaps to cure him. His eyes were both destroyed, twenty-four hours after the reaction had set in, by perforation of the cornea.

"The third case was a man of sixty, feeble and very fat. Both his corneæ became perforated on the fifth day after the inoculation, but the perforation being only central, he gained sight enough to go about.

"Of the two cases where one eye only had been inoculated, there was one in a man of intemperate habits. Four days after the inoculation, perforation took place, and, though the pannus was cured, vision became worse than before. The second patient had an exceedingly strong pannus, and was cured on one eye, but refused inoculation on the other. A return took place, after some time, and he subsequently died.

"In order to appreciate the result of treatment in these cases, therefore, it is well to mention that twenty-two eyes were inoculated, and six of them affected with consecutive ulceration of the cornea; that two eyes were totally destroyed; two gravely injured, but retained some vision; two left in a state allowing the patient to go about.

"The drunkard and the little boy with incurable pannus, before the inoculation, were not fit for the treatment, and if these cases are deducted, there remain but three cases of ulceration in eighteen eyes. Of those three cases only one was so gravely attacked that its vision amounted to very little afterwards; the others kept a very useful amount of sight.

"The cases were all almost desperate, Dr. W. continues, and states that he thinks his experience entitles him to say that if all cases of trachoma were treated right away by inoculation, without regard to the state of the cornea, the proportion of patients definitely cured, with good vision, would be larger than by the other remedies. Finally, he very judiciously remarks that it is advisable to make a secret to the patients of the source of the remedy, and records the supposition of an inquisitive lady patient, who thought that it came from the 'back-leg of the devil,' adding that she was pretty near the truth!

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* Messrs. Warlomont and Hairon, in the ensuing discussion, although considering the results obtained by Dr. Williams very encouraging, expressed their belief that these results would have been still better if he had not first tried, as he stated himself, all other remedies. They concur in the statement that the existence of a uniform pannus is an excellent security against *ulceration of the cornea*, while the dangers of ulceration increase if the corneal *exsudations are on some spots* reduced, or have disappeared, by other therapeutic interference.—Ed.

"*Partial Ablation of the Eye.*—Dr. W. is in favor of sacrificing a useless and painful eye, in order to discard danger from the other. No experienced ophthalmologist, he says himself, disagrees with him on that subject, but which operation, he asks, has to be performed—extirpation of the whole globe, or partial ablation? Dr. W. is in favor of the latter, and for the following reasons: (1,) The operation is, he says, much less serious than extirpation; (2,) it is more quickly performed; (3,) it disfigures the patient less; (4,) it is just as efficient for the protection of the other eye; (5,) it leaves a more favorable stump for the wearing of an artificial eye.*

"Dr. W. makes a flap upwards, like in extraction for cataract, only a little behind the margin of the cornea, and finishes the ablation by seizing the flap with a forceps and cutting off the rest of the cornea with the same knife. He has had perfect results in many cases; the pain ceased, the other eye was saved, and the conditions for the use of an artificial eye were more favorable than they would have been after an extirpation.†

"*Trichiasis and Entropion.*—The readers of the *American Journal of Ophthalmology* recollect the description of a new operation for these affections, described in the review of the *Clinical Observations*, by Drs. Pagenstecher and Saemisch, (No. 2, p. 85,) which is a modification of Gaillard's operation. Our learned *confrère*, Dr. Williams, who recommended ligatures for these affections years ago already, has lately added to this treatment the division of the external canthus. We therefore abstain from reproducing his views in reference to this subject, referring our readers to the above-quoted review, but give Dr. W. due credit for having 'co-invented' the operation Gaillard-Pagenstecher, a credit which, we think, his modesty forbade him to ask from the distinguished members of the Congress."—*Amer. Journ. of Ophthalmology.*

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* As we hold different views from Dr. W. in this respect, we beg leave to remark that, ad 1, we can not see the seriousness of an operation which, like extirpation, is performed without any loss of blood, and hardly ever requires any after-treatment; ad 2, the question of quickness is insignificant in two operations which both do not take more than five minutes at the utmost; ad 3, the patient wearing an artificial eye, the observer can not see whether there is a stump below or not; ad 4, this point is very doubtful, according to our experience, and seems also so from theoretical reasons; ad 5, an artificial eye can equally well be worn with extirpation well performed.—Ed.

† On this last point we agree with Dr. W., in so far as the existence of a stump renders the artificial eye more movable and makes the eye look less sunken than after extirpation; but, as we already stated above, besides this, the latter operation is a better guarantee against sympathetic affections of the other eye. The muscles, which are all left if the extirpation is performed according to Bonnet's method, constitute a stump, in many cases just as valuable, and always less irritable than any other, with rudiments of the eye in it, and the artificial eye may be worn a few days after the removal of the organ. Pagenstecher, in the last (second) part of the "Clinical Observations made in the Eye Hospital of Weisbaden," published a paper "On Enucleation of the Globe and Sympathetic Inflammation of the Eye," and speaks of the ablation as of an obsolete method, "followed by a tedious process of cicatrization, where one was very fortunate if no purulent panophthalmitis ensued." "There will be no doubt in such cases henceforward," he says, "and extirpation will always be preferred, as it has the same result in a much shorter time, and always allows the wearing of an artificial eye immediately."—Ed.

Braithwaite's Retrospect.—We have received Part XLVII. of this most excellent and standard reprint. It has long since become an indispensable with many of our physicians, and its character is well known to all. The present Part fully sustains its old reputation as the cream of the medical literature of the half year.

Professor Scanzoni.—It would appear that this eminent obstetrician was on the point of leaving the Wurzburg chair, where he has acquired such fame. Thereupon a petition, numerously signed, was sent to the king of Bavaria, praying that measures might be adopted to induce the professor to stay at Wurzburg. The king immdiately wrote to Scanzoni, *propria manu*, requesting him to stay, and allowing him to intrust the therapeutical part of the teaching to his assistant, Dr. Franque. This arrangement has settled the matter ; and Dr. Scanzoni has left for St. Petersburg on account of the accouchement of the empress, and will remain four weeks in that capital.

The Princess of Wales.—It is observed that Her Royal Highness the Princess of Wales has discontinued her morning rides, and from this and other circumstances the happiest auguries are drawn.

Army Medical Intelligence.

General Orders, No. 131.

HEADQUARTERS DEPARTMENT OF THE OHIO, Cincinnati, Aug. 13, 1863.

Surgeon John T. Carpenter, U. S. Volunteers, is appointed a member of the Department Staff, and announced as Assistant Medical Director Department of the Ohio. He will be recognized and obeyed accordingly. By order of Major-General Burnside

W. P. ANDERSON, Assistant Adjutant-General.

Official : S. S. SUMNER, Capt. and A.D.C.

Dr. W. H. Church, U.S.V. and Medical Director of the Department of the Ohio, has taken the field with Gen. Burnside.

Dr. John T. Carpenter, U.S.V., Assistant Medical Director, remains in this city, with a general supervision of hospitals.

Dr. Perley, Medical Inspector-General of the United States Army, has resigned.

There are a number of Surgeons and Assistant-Surgeons required for the regiments of U. S. Colored Troops. The pay is the same as that of other regimental medical officers, Surgeons, $163.00, and Assistant-Surgeons, $112.83 per month. They must be examined by a Medical Board previous to appointment, and the general principles of examination are the same as those observed in the examination of Assistant-Surgeons of Volunteers. Application should be made to the Surgeon-General, U.S.A., at Washington, D. C., for permission to come before the Board.

Acting Assistant-Surgeon S. Leslie, U.S.A., upon being relieved from duty in Goyosa Hospital by Acting Assistant-Surgeon H. Bussy, U.S.A., will repair to Jefferson Barracks, Mo., and report for duty to Surgeon J. F. Randolph, U.S.A., in charge of U. S. Military General Hospital at that place.

Surgeon J. L. Teed, U.S.V., will report in person without delay to Major-General Rosecrans, commanding Department of the Cumberland, and by letter to Assistant Surgeon-General R. C. Wood, at St. Louis, Mo.

By direction of the President, the following named officers are dismissed the service of the United States:

Assistant-Surgeon E. G. Marshall, 124th New York Vols., on account of habitual intoxication.

Assistant-Surgeon Alexander Wilson, 121st Pennsylvania Vols., for absence without leave and drunkenness.

A Board will assemble at St. Louis, Mo., on the twentieth day of August, 1863, or as soon thereafter as practicable, to examine and report upon the qualifications of applicants for appointment as commissioned officers of colored troops.

The Board will consist of Colonel D. Houston, 7th Regt. Missouri Vols., Major A. A. Engle, A.D.C., Major L. D. Hubbard, 3d Illinois Cavalry, Captain J. F. Dwight, 4th Missouri Cavalry, and 2d Lieut. D. W. Whitaker, 10th Regt. Kansas Vols. The junior member of the Board will act as Recorder.

The Commanding General of the Department of the Missouri will detail a surgeon from volunteer service, to examine as to the physical qualifications of such applicants as may present themselves before the Board for examination.

The Board will continue its sittings from 9 A. M. to 5 P. M. daily, Sundays excepted. It will be governed in its proceedings by the rules and instructions published in General Orders Nos. 143 and 144, War Department, 1863, and will make reports weekly, or oftener if specially required, of all persons examined by it.

By direction of the President, Assistant-Surgeon John H. Sullivan, U.S.V., is hereby dismissed the service of the United States, for drunkenness and neglect of duty.

The following assignment of medical officers is hereby made:

Assistant-Surgeon C. K. Winné, U.S.A., now on duty at Madison, Ind., to report for duty to the Medical Director, Department of the Monongahela.

Assistant-Surgeon L. S. Comstock, 155th New York Vols., to report for duty to the Medical Director, Department of Washington.

Surgeon Charles H. Crane, U.S.A., now at New York awaiting orders, to report to Colonel W. Hoffman, Commissary General of prisoners in Washington, for duties connected with prisoners of war.

Assistant-Surgeon S. S. Schultz, U.S.V., recently appointed, to report to the Medical Director, Department of the Ohio, at Cincinnati.

Special Selections.

Physiology of Tea-Drinking.

Sir—Your annotation on Tea-drinking (July No., p. 484) contains much that is suggestive, especially where you trace some of our social habits to its use. You have touched mainly on the cheering effect of tea, and a great deal might be said in addition on the amount of toil, mental and bodily, that may be accomplished under its use, as well as its refreshing power after loss of rest. But there is much to be said as to its disadvantages. These are mainly, but not entirely, seen among the poorer part of the working classes. Many people take tea at all hours of the day, at all the four customary meals, or indeed oftener. At whatever time you call, they are everlastingly "at tea." With the very poor, tea is merely used as a substitute for more substantial or more stimulating diet. A very good substitute it is; but it is only a substitute, and we can not be surprised that a train of bad symptoms follows the abuse. Want of appetite, feeling of sinking, tremulous tongue, constipated bowels,—probably from infusing the tea till all the tannin is dissolved out, that it may seem "strong,"—frequent headaches, languor, and all the other consequences of debility follow. Prolapsus uteri is frequent in this class of cases; but whether it is in any degree a consequence of excessive indulgence in tea, or a cause of the habit, it is not always easy to determine, as the class of patients most liable to this affection—women who have borne families and worked hard, washerwomen, the older female mill hands, etc.—are exactly those most liable to the mild form of intemperance under consideration. It is astonishing with what perseverance these people will continue to take tea after it is persistently rejected by the stomach; they have so often found it a friend that they trust it when openly betraying them. The substitution of good meat diet, with a little beer, will generally cure the habit by degrees, as it was begun through necessity rather than choice.

There is another class of cases in which the same habit is contracted from choice, or at the least for convenience. Middle-aged women in good circumstances, but without sufficient employment, find that they feel "low" while sitting still after dinner. A cup of tea dissipates *ennui*, and is repeated until it becomes a daily habit. As the beverage is taken long before the process of primary digestion is over, the meal from which all fluid has once been absorbed becomes rediluted, and absorption has to be commenced again, under the unfavorable condition of a fuller portal vein, before digestion can be proceeded with. In many cases where the want really proceeds from indigestion, a little wine or brandy would best supply it; but perhaps the *patient is a tea-totaller*, and prefers any bad effects at a distance to *relinquishing a favorite* theory. The appetite decreases, and, as a consequence, tea becomes more and more a necessity. Indulgence in strong tea for "nervous" purposes, though belonging to a similar class of patients, differs somewhat in effects. But it is among the factory workers of the manufacturing towns that tea-drinking is most abused. Many who could well afford good food, men as well as women, dine at the mill on tea and bread or cake exclusively. At some mills many scores of vessels of tea are warmed in a kind of oven prepared for the purpose. Even those who dine at home, in many cases take nothing more substantial, and of course when taken ill they are still less inclined for substantial food. Moderation in tea alone has often been found materially to benefit a case of incipient phthisis by admitting of improved digestion. The flatulence produced by over-much indulgence in tea will frequently cause a semblance of heart disease, or aggravate the real malady, and will cause great distress in chronic bronchitis or asthma. Though these effects occur so often as to be the mere commonplaces of every practitioner in the manufacturing districts, it is by no means always easy to convince the patient of the necessity of renouncing a habit taken up from preference, and lovingly followed through years of tolerable health.

These are some of the reasons why the extra consumption of six millions of pounds of tea is not necessarily a gain to the community. The price is already so low, that tea is much cheaper than alcohol in any form, so the reduction can not in any way diminish drunkenness. It is true that a lower duty may provide the poor with teas much superior and wholesomer than much of the rubbish now sold; but that this will prove a benefit is yet to be seen. In the meanwhile we must not be too sanguine, but remember that the abuses of tea, though perhaps fewer than those of any other *paratriptic*, are numerous enough.

I am, sir, yours, etc., A NORTHERN SURGEON.

—*London Lancet.*

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The United States Army Laboratory at Philadelphia.

Since our last notice of this enterprise of Surgeon-General Hammond's, we have twice visited the laboratory, where Dr. A. K. Smith, U. S. Army, the Director, and Prof. Maisch, the Chemist, politely showed us the several departments at present in operation. The Laboratory buildings are those formerly occupied by Crew, Rogers & Crew, for their chemical works, at Sixth and Oxford Sts. The main building has three stories, with a large one-story building attached, and several detached structures for special purposes. All the heating in the main building is effected by steam, except such as is performed by gas burners. A twenty-five horse power engine, with appropriate boilers, is erected in a position central to the laboratory operating rooms, and yet separate. Immediately above the boilers, and deriving its heat from them, is the drying-room, which opens by a door into the mill or powdering room. In the latter there are at present two pairs of chasers, and one Bogardus' mill. Two more pairs of chasers are to be erected in a short time. Mr. Maisch informs us that he has succeeded in getting his bolting machine to operate very successfully. In this room is also the machine for making the preparations of free metallic mercury, as blue pills, mercurial ointment, etc., by shaking, as described by Dr. Squibb, except that the plan of the machine is more simple. In this room, all the fine powders, as ipecac, rhubarb, jalap, etc., are prepared, and sent up stairs to be bottled, whilst the chief occupation of the mill is in preparing drugs for percolation. Proceeding eastward from the mill room, the visitor enters the general operating room for Pharmaceutical and Chemical processes; commencing with the percolators, which are adjacent to the mill room, the processes become more chemical towards the further end. The visitor can here witness the concentration of liquids on water baths, and in stills for fluid and solid extracts, preparations of morphia, and for the crystallization of salts. The preparation of the officinal solutions of ammonia is conducted here also, but apart from the other processes.

The large percolators are constituted of wood, lined with tinned copper, varying in capacity from 260 gallons to 150 gallons. Besides these, vessels of smaller size, constructed of tinned iron, are in use for lesser operations. 280 pounds of colocynth, and 600 pounds of valerian are percolated at one operation. These wooden percolators are arranged on a stage, on a level with, and connected with the mill room, so as to be easily charged. Each percolator has a manhole in front near the bottom, closed by clamps and screws, through which the exhausted material is extracted after each operation. Hanging in front of each percolator is a black-board, on which is written the leading facts of each operation as they are developed, such as name and quantity of material, menstruum, and percolate, with remarks when necessary. Along the eastern end, a range of jacketted steam evaporators are in operation, and jacketted stills. In a detached brick building, on the north side of the lot, is the room for furnace operations, including the preparation of oil of wine, which will be made in eight-gallon retorts, on sand baths. Here the oxidation and solution of metals, and numerous other operations involving direct heat, will be conducted. In the centre of the area, a building is being constructed specially for the manufacture and bottling of ether, sweet spirits of nitre, and chloroform, with a subterranean store-room. Steam heat only will be used, and no light or fire of any kind allowed in the building. The apparatus for ether will be that of Dr. Squibb, described before in this journal. By thus isolating these articles, much of the usual danger of fire will be avoided. Ample space remains in the yard for extending the buildings if required.

Returning to the main building, we find the storekeeper's room next to the mill room on the first floor, and north of this, other rooms, among which are the office and Mr. Maisch's private analytical laboratory, neatly fitted up with apparatus needed in the examination of drugs and chemicals previous to their purchase, when required. On the second floor north is the sewing-machine room, in which twelve girls and a cutter, operating ten sewing-machines, make one thousand linen sheets daily, and pillow cases, towels, and other items required in the army hospitals. On the opposite end of the building is the filling room, where all powders, salts, pills, and other dry substances are put up in bottles for the medicine chests; and in a similar room directly above this all the various fluid extracts, tinctures, and other liquids are bottled and labelled, each kind put up by itself on shelves for temporary storage, above the counter. The work in these two rooms occupy twelve girls, besides six others engaged in washing the bottles. In the pill room, four girls are engaged in making pills. At present the common pill machine only is employed, the composition and formation of the mass is superintended by a Graduate in Pharmacy. The pills made are pil. opii, pil. cathart., comp. and pil. hydrarg., U. S. P.; and pil. camphoræ et opii, pil. colcynth comp. et ipecac, and pil. quiniæ sulph. *aa* 3 grs.

It should be understood that the medical supply-table for the army is by no means so comprehensive as the Pharmacopœia, and consequently the scope of operations is confined chiefly to those preparations on the list. It is intended to make Ceratum Simp., Cantharidis, and Resinæ, and, as soon as arrangements can be made, to spread adhesive plaster and isinglass plaster for the entire army. Morphia will also be made to an extent adequate to the wants of the whole army. It has been determined to manufacture sulphate of quinia; and soon as the *bark* arrives this will be commenced, and the experiment of its economy made. About two hundred serons of Cinchona have been purchased.

The basement of the main building is paved with brick throughout, and is used for storing and bottling liquors, and fixed oils. Three girls attend to the bottling of liquors. The medical store wagons and panniers are filled at the laboratory, but made elsewhere. The bottles used are all marked in the moulding "U. S. A. Hosp. Dep.;" and are furnished from Pittsburgh. Each bottle of any size is enclosed in a square pasteboard box surrounded with sawdust or rice husks, and these closely packed in wooden boxes appropriately marked, and then conveyed to the storehouse at Sixth and Master Streets.

All drugs are purchased on the requisition of the Director, Dr. Smith, by an order from the medical purveyor (Dr. Robert Murray, U.S.A.) to a drug broker, it being clearly understood that all purchases are subject to the inspection and analysis of Mr. Maisch.

Such is a hasty view of this new enterprise. So far, we are informed, on many leading articles great economy has attended the experiments, and all has been well done. In the sewing-machine department, since operations commenced, Dr. Smith says that they have paid for the machines, and saved the Government $1200 besides! Of course it will take a longer period to determine the actual facts of the case, but there can be but little doubt of the expediency of the measure, whilst the necessity for large supplies exists, and under the care of such earnest workers as Dr. A. K. Smith and Prof. Maisch it will receive a fair trial.—*Journal of Pharmacy.*

Editorial Abstracts and Selections.

1. *Sarracenia Purpurea as a Remedy for Small-Pox.*—In a letter to *The Times* of Tuesday last, Surgeon-Major Logie, Royal Horse Guards (Blue), stationed at Windsor, writes that "Some time ago, seeing a paper written by Assistant-Surgeon Miles, of the Royal Artillery, on the efficacy of the North American plant called the *Sarracenia purperea*, or pitcher plant, in the treatment of small-pox among the Indians, my colleague (Mr. Agnis) and myself have given this remedy, which has been imported into this country by Mr. Miles to the house of Messrs. Savory and Moore, a fair trial; and I am happy to say the eleven cases in our hands have recovered under its peculiar influence. This remedy I consider a boon to the public, for this reason—it is so easily managed; any one can make a decoction or infusion of the root, like tea. An ounce of the root is sliced and infused in a quart of water, and allowed to simmer down to a pint; this is given in two tablespoonful doses every four hours, while the patient is well nourished with beef-tea and arrowroot. Four of the cases in my hospital have been severe confluent cases; they have throughout the disease all been perfectly sensible, have had excellent appetites, been free from pain, and have never felt weak. The effects of this medicine, which I have carefully watched, seemed to arrest the development of the pustules, killing, as it were, the virus from within, thereby changing the character of the disease and doing away with the cause of pitting, and thus avoiding the necessity of gutta-percha and india-rubber applications, or of opening the pustules. In my opinion, all anticipations of disfigurement from pitting may now be calmed, if this medicine is given from the commencement of the disease. Before leaving this subject, I may here caution the public that the useful part of the plant is its root, as recommended by Mr. Miles; and it can only be obtained from Messrs. Savory and Moore, to whose house alone it has been imported. With the usual kindness of Dr. Gibson, the Director-General, I have been amply supplied with it for the use of my regiment. So much am I impressed with the efficacy of it in small-pox over the old mode of treatment that I hope to hear of it in every country gentleman's medicine-chest, and before long that we shall see no more faces, as described by Dickens, like the interior surfaces of sliced muffins."—*London Lancet.*

2. *A Mode of Preventing Pitting in Small-Pox.*—I am desirous of adding my testimony in favor of a mode of preventing pitting in small-pox, not, I believe, in general use, and which, though spoken of in "Wilson on Skin Diseases," is either not mentioned or not laid stress on in our works on the general practice of physic.

I allude to the Arabian plan of pricking the pocks. I have tried it many times, and have never been disappointed in the result. Three of the cases especially abide in my memory, in which the patients were very fair, and two of them very pretty, and who all retained their fairness and beauty without the vestige of a scar.

My practice is to watch the progress of the papules, and on the fourth or fifth day, when I think the vesicle have nearly attained their full size, and before they become pustular, I cut off the apex of each vesicle with a lancet; for I find it is not sufficient to merely prick the vesicle slightly, or the exuding lymph will dry and seal the vesicle, which may thus go on to the formation of pus. This procedure will not cause the least pain if done with a sharp lancet, and a light and steady hand—the summit of the vesicle only being cut, and the flat of the instrument held on the same plane as the skin. Having opened all the pocks, I let the patient continue to lie on his back, and place a small poultice (without a rag) on such parts as are much inflamed. When these little poultices have been on an hour or so, they should be removed, the places lightly sponged, and covered with sweet oil by means of a camel's-hair brush. On the following day, if the pocks are inflamed, and matter forming beneath the crusts, I open them, and poultice again. In this way the inflammation, suppuration, and ulceration or sloughing of the skin beneath the pock are cut short, and a scar prevented.

In the last case I had, the eruption was very abundant, and confluent in places. Still I confess I have happily had no really bad confluent case since I have used this treatment, though I had much experience of such in 1848; and I think it probable that if I had a case of low type where the eruption was flattened, I should not prick the vesicles till I had by stimulating the patient got the pocks to project more fully, or I should fear that the excitement and irritation of the operation might depress the invalid; and it is even possible that the small discharge of fluid from the cuts might drain away a fraction of the strength so desirable to retain. I should not be deterred, however, in a quite confluent case if the eruption stood well out, and I think it as rational to try and cut short the inflammation of the skin in this disease as to make incisions for prevention of suppuration and sloughing in cellulitis and other affections.

An advantage of this instrument over that of the application of nitrate of silver is, that it does not cause pain or increase the febrile action, nor does it in any way interfere with favorable progress.

It may be objected that the process is tedious, and exposes the operator to the risk of contagion; but by getting behind the patient as much as possible, and avoiding his breath, the risk may be lessened; and if time can not be spared, I see no objection to intelligent nurses being trusted, after instruction, to perform so trivial an operation.

This method will be found far superior to the use of the mask or unctuous preparations, though it may be combined with the plan of covering the face. The application of a solution of caoutchouc in chloroform, lately recommended, I have not tried; but I imagine it must produce a most unpleasant feeling of constriction, and can not certainly be more effectual than the foregoing in preventing disfigurement.—R. B. Painter, M.D., in *London Lancet.*

3. *Gunshot Wounds.*—At a meeting of the United States Army Medical and Surgical Society, of Baltimore, Dr. Dare gave the statistics of twenty-six cases of gunshot wounds of the thoracic cavity penetrating the lungs, treated at the U. S. Army General Hospital, Camden Street, Baltimore.

Character of Missiles.—Eighteen round balls, seven minié, one grape shot.

Location of Wounds.—Twelve of right lung, fourteen of left; twelve were in the upper, eleven in the middle, three in the lower part of the chest; twenty-four balls passed out, two remained in. All spat blood at some period except three.

Result.—Eight died, eighteen were discharged.

Of the fatal cases five were wounded in the upper, two in the middle, and one in the lower portion of the lung.

Most of the twenty-six cases were in very bad condition when admitted; bleeding was out of the question. Nutritious diet, tonics, and stimulants, were freely administered. While free suppuration was going on the orifices were kept open.

Wounds of the pericardium penetrating the heart were, as a rule, immediately fatal; occasionally the patient survived for hours, days, or even weeks. Cicatrization had been observed after death from other causes, which seemed to indicate recovery after a wound of the heart.

Wounds of the Abdominal Cavity.—A wound of the diaphragm was indicated by the course of the ball, singultus, dyspnœa, etc. It was said by Guthrie never to heal, and that after death, long after the injury, protrusion through the opening of a portion of the stomach or bowels had been observed. The contents of the abdominal cavity might be fatally injured by a spent cannon-ball without a solution of continuity of the soft parts. Dr. Dare had been told by an old physician, that he had known the abdominal aorta to be ruptured by a kick in the abdomen, inflicted with a man's boot. The doctor made an autopsy, there was no aneurism. The symptoms of a wound of the intestine were, the passage of blood by the rectum, and of fæces through the wound; but in many cases it was difficult or impossible to tell at once whether the intestine was wounded or not.

The wound of the intestine, if accessible, and more than a few lines in extent, should be sewed up with the Glover's suture, and the bowel returned. The bowels should be kept confined, and only fluid aliments given for a week or ten days. If inflammation supervene, leeches and warm fomentations should be used. Wounds of the liver, kidneys and bladder, were usually fatal. In a wound of the bladder the great indication was to keep in a catheter, in order that the urine might flow through its natural channel.

E. G. Waters, A. A. Surgeon U.S.A., gave the particulars of several cases of wounds of the lungs, included in the statistics given of Camden street Hospital. In one the ball entered the left breast above the nipple and passed through; the patient spat blood four weeks, but recovered. In another the orifice remained open five months, during which time the man went about and occasionally got drunk.

Dr. W. reported a case of recovery after a wound of the abdominal cavity perforating the intestine. The ball entered two inches above the umbilicus, passed directly through and emerged about three inches from the spine. According to the patient's account, feculent matter passed through the posterior orifice, and on one occasion some blackberries which he had recently eaten. The man was much emaciated when admitted; the orifices had healed, but the posterior subsequently reopened, and matter, feculent beyond doubt, was discharged. The man recovered after a while, and left the hospital in excellent health.

Dr. W. thought that bleeding from the arm might, in some cases, have a tendency to arrest pulmonic hæmorrhage; but that, in anticipation of long continued suppuration, it was not advisable to lower the power of the system by loss of blood, in the attempt to prevent or subdue inflammation.

Surgeon Bliss, U.S.V., remarked that it was sometimes extremely difficult to diagnose a wound of the lung, and cited several cases in which men spat up blood after wounds which did not penetrate the thoracic cavity. For the shock and prostration after a wound of the chest, Dr. Bliss advised brandy and opium in combination. He corroborated Dr. Waters's objections to bloodletting, and stated that he had never seen it practised on the field. After punctured fractures of the cranium Dr. B. recommended the early use of the trephine, whether there were symptoms of brain trouble or not.

A. A. Woodhull, Assistant-Surgeon United States Army, related the case of a friend who was shot through the cavity of the knee-joint. Dr. Rodgers, in order, as he stated, to prevent inflammation of the joint, ligated the femoral artery. The result seemed to justify this novel mode of treatment; the officer recovered with some stiffness of the joint and contraction of the flexor muscles.

Jas. H. Boone, A. A. Surgeon U.S.A., stated that he had treated seven of the twenty-six cases of gunshot wounds of the lung, statistics of which had been given. In one case a minié ball passed through the middle lobe of the right lung, fracturing the scapula. The patient spat blood at first. Air passed freely in and out of both orifices. When admitted he was much emaciated; there was free purulent discharge from the wound. As an experiment, Dr. Boone stopped up, as closely as possible, both orifices. Air ceased to be respired. The man spat up for a few days about as much pus as had previously been discharged from the orifices. He commenced to improve, and in course of time left the hospital apparently well. All of the cases were treated with tonics and stimulants. Five lived, and left the hospital. Five died of traumatic pneumonia.—*Amer. Med. Times.*

4. *Cases of Mydriasis Treated by the Solution of Old Calabar Bean.*—In calling the attention of the students to this new agent for obtaining contraction of the pupil, Mr. Ernest Hart, of St. Mary's Hospital, said that the need for such an agent had long been felt in ophthalmic surgery, and that he had been experimenting for some time

with various substances of which he had hoped that the local application might produce contraction of the circular fibres of the iris. With this view he had employed solutions of various alkaloids, in glycerine, including morphine, strychnine, digitaline, and ergotine; but the results were not satisfactory. Dr. Argyll Robertson, of Edinburgh, however, had lately laid before the profession an account of the operation of solutions of the Calabar bean on the pupil, which showed it to possess the desired quality. Dr. Robertson's paper on this subject had been read before the Edinburgh Medico-Chirurgical Society on the 4th of February, 1863. It had been published subsequently in the *Edinburgh Medical Journal* for March. The original investigator of the properties of the bean was Dr. Christison, who had read an account of those properties before the Royal Society of Edinburgh on Feb. 5th, 1855, in an important paper reprinted in the *Pharmaceutical Journal* in 1855; and subsequently Dr. Fraser had treated of it in his inaugural thesis. It was one of the most powerful poisons, possessing a direct control over the action of the heart, but not paralyzing volition. Its systemic effects somewhat resembled those of aconite. The active principle had not yet been isolated; but Mr. Hart stated that he believed Dr. Christison was engaged in an effort to procure it; the difficulty at present was due wholly to the scanty supply of the bean. It was held in great veneration by the natives of Calabar as an ordeal poison, and was not yet to be obtained in commerce.

Mr. Hart showed the effects of the solution prepared of different degrees of strength. They had been prepared as a watery solution of the alcoholic extract of the bean according to the direction of Dr. Argyll Robertson; that in which one minim corresponded to three grains of the bean answered best. It counteracted the effects of a solution of atropia, of three grains to the ounce, in dilating the pupil —inducing recontraction. Hence it is an agent of great utility in removing the inconvenience of dilatation of the pupil for the purpose of ophthalmoscopic study. Dr. Argyll Robertson had informed Mr. Hart in a letter of the tendency of the watery solution of the alcoholic extract to decompose. This decomposition occurred very rapidly, the solution becoming in a few days pink in color (instead of being colorless) and fetid. It was arrested by the addition of glycerine to the watery solutoin. But Mr. Hills—of Messrs. Jacob Bell and Co.'s —had found that the alcoholic extract was soluble in glycerine, or apparently so; and Mr. Hart was now using the glycerine solution. This might prove to be a chemical solution, while the other certainly was not.

The action of the Calabar bean in counteracting mydriasis was well shown in several cases: one of partial mydriasis from paralysis of the third nerve, and one of the same condition from excessive debility after fever and accompanying asthenopia. Its power as an antagonist of atropine is equally shown by the firm contraction of the pupil and accommodative changes which it produces in the normal eye. Its action is, however, less durable than atropine; and if it be desired to *make use of its curative* effect in cases of mydriasis, Mr. Hart thought it would be found desirable to repeat the drop every four hours. Sometimes its instillation caused slight irritation ; but there was often none at all.

In conclusion, Mr. Hart said he had been the first who had employed this agent in London, but that he should abstain from publishing at length his observations on the physiological and therapeutic effects of the drug, considering that Dr. Argyll Robertson, who had introduced this agent, and had with great care and sagacity at once investigated its powers and foretold its uses, should be allowed to gather the first fruits in this interesting field of observation which was his own by right of discovery. He would say that his observations completely confirmed those which that gentleman had already published. —*London Lancet.*

5. *Case of Amaurosis following Parturition.* — This phenomenon had occurred on seven previous occasions under the same conditions, but it did not appear after the first labor. The patient was married, and thirty-four years of age. The blindness, which was total, occurred in both eyes suddenly about the third day after the birth of each child, and lasted on an average from three to five weeks. The patient had never lost more than the normal quantity of blood ; she had never taken ergot ; there was no suppression of the milk or lochia, nor was the urine albuminous. A careful ophthalmoscopic examination had been instituted, but the evidence adduced was entirely negative. Dr. Eastlake regarded the case as unique, and concluded his paper by stating that the only author who had described any case at all similar was Beer, in his "Lehre der Augenkrankheiten."—*London Lancet.*

6. *Acute Glaucoma treated by Iridectomy: Good Result.* — The case of acute glaucoma we have to record is one of those remarkable instances which occasionally come under treatment at the Royal London Ophthalmic Hospital, under the care of Mr. Bowman, and serve to prove indubitably the good effects of iridectomy, and to show that this operation when properly performed is capable, not only of completely arresting the progress of a disease which has defied the skill of so many, but also of restoring to the patient an amount of sight which previous to the introduction of this operation was seldom even hoped for.

The history is very similar to a case we have recorded under the care of Mr. Lawson, at the same hospital, where one eye has been previously lost by the disease, and the other had been similarly attacked ; but coming under his treatment within twenty-four hours after the acute symptoms began, iridectomy was performed, and sufficient sight regained for the patient to be able to read No. 2 or pearl type.

In the patient now under your notice, the left eye had been suddenly seized with *glaucoma fulminans*—a name lately given by Von Graefe to rare cases of exceedingly intense glaucoma, under which the sight is lost within a few hours, even before the signs of acute inflammation are strongly developed. See the last number of the

Archiv für Ophthalmologie. Blindness rapidly supervened, with acute inflammation, finally resulting in disorganization of the eye. For this tense, painful, and blind eye she was admitted into the hospital; but failing to gain relief from treatment, the globe was removed. It was whilst she was in the hospital that the right eye became attacked with glaucoma; but, rapid as was the progress of the case, the disease was arrested by iridectomy, and she is now able, with a 20-inch-focus convex glass, to read No. 2 easily, whilst previous to the operation she could not tell letters of No. 20, or eight line Roman type, or discern the features of her friends.

There is another point of interest in this case; for, differing from most others, there is a good assignable cause for the first commencement of the disease, and probably in this patient it is the true one. Long watching, great exhaustion, and a sudden fright she believes produced the disease; and the effect seems so rapidly to have followed the assumed cause that one can not disregard the apparent connection between the two.

History.—Mary W——, aged seventy-three, a monthly nurse; always had good health, and up to Christmas last had never suffered any inconvenience or annoyance whatever from her eyes. One night about that time, whilst nursing a lady, and after two or three nights' watching, during which she had little or no sleep, she was, whilst half dozing in a chair, aroused with fright by a noise produced by the breaking of the window-rope, causing her to think that some one had entered the room. This occurred at two o'clock A. M. An hour or so after this, she had violent pain in the left eye and in the head, accompanied by nausea, but no vomiting. The pain was so severe that she remembers no other symptom. At nine o'clock in the morning she was quite blind with that eye, and unable, she says, to distinguish light from darkness. She did not apply for any advice, nor undergo any treatment, although the eye continued exquisitely painful, and from her account seems to have become acutely inflamed. Compelled to leave her situation, and wanting almost the common necessaries of life, she came to the hospital, and was admitted on the 6th February.

State of the Left Eye on Admission.—The whole globe acutely inflamed; tension extreme (T 3); the cornea rough and semi-opaque, and the humors within, as far as could be seen, quite dull. The eye was intolerably painful; indeed, it was on account of the unbearable pain, as she described it, that she sought for relief, and was willing to undergo any treatment to gain it. She had no perception of light.

As the eye was useless, very painful, and clearly undermining the patient's health, Mr. Bowman removed it. After the operation all pain ceased, and for a few days she progressed most favorably. She was again able to sleep and to take her food, and expressed herself as feeling quite well.

On February 12th, six days after the excision of the eye, she was at two o'clock in the afternoon seized with pain in the right eye, and she saw, she says, beautiful colors like a peacock's tail in the sun. The pain in the eye increased, and so severe was it in the top of her head that she felt she could hardly rest on her pillow. She did not vomit, although she had a great feeling of sickness. In the evening she saw around the candle in the ward a large rainbow, and the light of the candle appeared red.

On the following morning (the 13th) she was seen by Mr. Bowman. She had passed a very restless night, and the pain in the eye and head continued. The tension of the globe was increased (T 3.) She was unable to read letters of No. 20 of Jaeger's test-type, or even to discern features, and could only just manage to count fingers at the distance of six inches. Under these circumstances Mr. Bowman at once performed iridectomy, removing a large portion of the iris in the upward direction. Soon after the operation she began to experience relief. She passed a good night without opiates, and in the morning there was a decided improvement in the sight. She continued to progress most favorably, the tension of the eye became permanently normal, (T n,) and all pain in the eye and head completely left her. In about a fortnight she was discharged from the hospital to attend as an out-patient.

Her sight has steadily improved since the operation, and the report (May 4th) states that with a 20-inch-focus convex glass she is able to read No. 2 or pearl type. The convex glass she is obliged to use for reading is not so strong as is ordinarily required at the advanced age of this patient.—*London Lancet.*

Obitual Record.

DIED, at Marietta, Ohio, July 24, 1863, SAMUEL PRESCOTT HILDRETH, M.D., of enteric fever, resulting in hemiplegia, after an illness of three weeks. He was about 80 years of age, and had resided in Ohio nearly fifty-seven years. We copy from the *Marietta Register* of July 31:

> DR. S. P. HILDRETH, so widely known as one of the leading and most esteemed citizens of Marietta, died last Friday night, (July 24,) at 11 o'clock, in his 80th year. He had been in his usual good health, a well-preserved and happy old gentleman, until Sunday, 5th inst. On that morning he went to church, of which he was a regular attendant, but at the evening service he was too unwell to attend. He gradually sank away, his mind but little clouded, if any, until he was gathered to his fathers in the fullness of his years, only about two months less than fourscore. His funeral was on Sunday, 26th inst., the services being in the Congregational Church, of which he was a member, conducted by Rev. Mr. Wakefield, of Harmar, and President Andrews, of Marietta College.
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> Dr. Hildreth was born in Methuen, Mass., Sept. 30, 1783, about a mile north of the present manufacturing city of Lawrence, on the Merrimac river. His family was one of some note in Massachusetts. He was descended, in the sixth generation, from Richard Hildreth, who emigrated from England over two centuries ago. Abel F. Hildreth, distinguished for many years as Principal of "Pinkerton Academy," at Derby, N. H., was his kinsman, and Richard Hildreth, the Historian, is his distant relative. His boyhood was passed in active work on his father's farm, where he acquired the habit of industry and tough-

ened his physical powers for a long, vigorous and useful life. From a "Social Library" in the town he formed the taste for reading, and continued a great reader until his last illness. After the common school, he prepared for college at Phillips Andover Academy, one of the best in New England. Without completing a collegiate course, he studied medicine with Dr. Thos. Kittredge, at Andover "North Parish."

In May, 1805, when less than 22 years of age, Dr. Hildreth began the practice of medicine in Hampstead, Rockingham County, New Hampshire, a small inland town. He there boarded with John True, Esq., whose brother, Dr. Jabez True, was then living in Marietta, having located here early in the summer of 1788, the first season of the settlement. From him he learned of a "good opening for a young man" in Marietta.

After sixteen months of practice in New Hampshire, he started, on horseback, Sept. 8, 1806, being 23 years old that month, and arrived at Marietta, Oct. 4th following. This place then contained about six hundred inhabitants. He remained here about nine weeks, when, on invitation of the leading citizens of Belpre, twelve miles below, to become their physician, he went to that place, Dec. 10, 1806. That night, never more to return to it, Blennerhasset left his "fairy island."

While in Belpre, August, 1807, he married Miss Rhoda Cook. She was a native of New Bedford, Mass., and came to Ohio in 1804, her mother having purchased a farm in Belpre, nearly opposite the mouth of the Little Kanawha. For fifty-six years they trod the path of life together—even tempered years to them; and reaping the reward of industry and prudence, a competence, the love of all, a family of children grown up to usefulness in life, a happy old age. Mrs. Hildreth survives, well nigh unto fourscore, "young for her years."

In March, 1808, after a practice of fifteen months in Belpre, Dr. Hildreth returned to Marietta, and ever after resided here. He wrote on April 6th last: "After a laborious practice of medicine for fifty-five years, I, two years ago, laid it entirely aside, and am waiting the time of my departure with resignation and hope." Who that knew Dr. Hildreth does not at once recognize the truth of these words written by himself?

> "He is the happy man whose life e'en now
> Shows somewhat of that happier life to come."

At the age of 27, in 1810, Dr. Hildreth was elected representative to the Ohio legislature. He was re-elected in 1811. He was a Democrat or Republican of that day, a supporter of the Administrations of Jefferson and Madison. On his re-election, in 1811, he beat the late Judge Ephraim Cutler, who was a Federalist, twenty votes in Washington county. Party lines were obliterated in the Administration of President Monroe, and later years found Dr. Hildreth and Judge Cutler acting in political concert, as Whigs. The taste of Dr. Hildreth did not lead him to political life, and after serving two terms in the legislature, he never again, we believe, became a candidate for office. He always, however, held decided political opinions, and was not so careless of his duties as to neglect to vote on the side of what he believed to be the right. He was a Republican, from the formation of that party, in 1854. It is proper to state, in this connection, that in 1811, while a member of the legislature, he was elected by that body "Collector of Non-resident Taxes" for the Third District of Ohio, (pay about $250 a year,) and held that office eight years, when, in 1819, the office was abolished.

Whatever Dr. Hildreth did, he did well. In 1810, fifty-three years ago, he became Clerk of the Trustees of the Ministerial Lands, and retained the position until his death. One of his last acts in health — the last time we saw him in life was when, a day or two before his final sickness, he came to procure a copy of an advertisement with reference to the temporary leases of the Ministerial Lands — the same cheerful old gentleman we had known for eighteen years. We thought then of his cheerfulness, a characteristic, and reflected:

> *"He wears the marks of many years well spent,*
> *Of virtue, truth well tried, and wise experience."*

Abroad Dr. Hildreth was known, and well known, for his scientific labors, for his various publications in medicine and several scientific subjects, and in local biography and history. Among his publications were — in 1808, a history of the epidemic of the year 1807; in 1812, a description of the American colombo, with a drawing of the plant; in 1822, an article on hydrophobia, and another on a curious case of Siamese twins, in his practice,— all of these in the *N. Y. Medical Repository;* in 1824, in the *Philadelphia Journal of Medical Science*, a full history of the great epidemic fever that visited the Ohio Valley and Marietta in 1822 and 1823; and in 1825, in the *Western Journal of Medicine*, Cincinnati, an account of the minor diseases of the epidemics; in 1826, he published in *Silliman's Journal of Science*, New Haven, a series of articles on the natural and civil history of Washington county. From that time until his death, nearly forty years, he was a contributor to the *Journal*, such articles as descriptions and drawings of fresh-water shells found in the Muskingum and other streams, several upon geological subjects, touching upon the geology of Southeastern Ohio, the salt-bearing rock, the history of salt manufacture from the first settlement of Ohio, the coal formation, etc.; "The Diary of a Naturalist," on the Seventeen-year Locust in 1829, again in 1846, and from 1826 to the present time, a journal of the weather, amount of rain, flowering of plants, ripening of fruits, etc., for each year.

In 1837 Dr. Hildreth was one of the Assistant-Geologists upon the State Geological Survey, and the report of his labors was published by the State, in connection with the reports of other geologists upon the survey.

In 1839 he was President of the Medical Society of Ohio, and delivered the annual address at Cleveland, a history of the diseases and climate of Southeastern Ohio from its first settlement, which was printed by the Society. In the same year he published a history of the settlement of Bellville, Western Virginia, continued in several numbers of the *Hesperian*, a magazine then published at Cincinnati, by Wm. D. Gallagher and the late Otway Curry.

In 1842 and 1843 he contributed many valuable articles to the *American Pioneer*, then published monthly at Cincinnati, by Col. John S. Williams. In 1848 was published his "Pioneer History," an octavo volume of 525 pages, "an account of the first examinations of the Ohio Valley, and early settlement of the Northwest Territory." His volume, octavo, 539 pages, "Lives of the Early Settlers of Ohio," followed in 1852.

In 1830 Dr. Hildreth began in earnest the collection of a Cabinet of Natural History, from the fossils, insects, shells and plants of Ohio; and by exchanges of these, acquired minerals, insects, marine shells, etc., from other quarters. In a few years he had four thousand specimens in natural history, arranged in cases and drawers, labeled, numbered and entered in a catalogue, with many curious relics from the "ancient mounds." In 185– he donated to Marietta College his cabinet, together with his scientific library, and various volumes, that are rare, upon the early history of the West. They occupy a room in one of the College buildings, known as the "Hildreth Cabinet." This donation made Dr. Hildreth one of four or five of the largest benefactors of the College.

The cheerfulness of Dr. Hildreth has been mentioned. He "looked on the bright side of things,"— loved beauty, although of an eminently practical turn of mind,— was very fond of flowers, which he cultivated diligently. Industry, and system in all that he did, may be accounted among his marked points. Besides his laborious medical practice, he accomplished very much, as he himself expressed it, by *saving* the "odds and ends of time." Without having a brilliant mind, he forcibly exemplified the fact that "Industry is talent." He was exact in all his dealings — an honest man — a Christian. His was a *complete* life. He "finished his work."

"His life was gentle; and the elements
So mixed in him, that Nature might stand up
And say to all the world, *This was a man!*"

THE

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ARTICLE I.

Hospital Gangrene.

A lecture delivered to Prof. Blackman's class at the Medical College of Ohio, session of 1860–61.

BY CHAS. S. TRIPLER, SURGEON U.S.A.

There are several grave accidents that complicate the course of traumatic injuries; some limited to individual cases, others pervading whole wards and hospitals. Hæmorrhage and traumatic tetanus are examples of the former. These complications never become epidemic, but are due generally to constitutional predisposition or peculiarity, that can not itself well be foreseen or its consequences prevented. I say "generally," not universally. But erysipelas, pyæmia and hospital gangrene, examples of the latter class, the accidents pervading whole wards or whole hospitals, are not due to individual peculiarity; on the other hand, they are engendered and propagated by hygienic errors that are in my opinion readily appreciated, and if the authority to put in operation the necessary preventive measures were vested where it ought to be, there is abundant reason to believe that in military hospitals these diseases would henceforth be known only historically.

It is my intention at present to give you some account of hospital gangrene, its causes, phenomena, nature and treatment. It is not necessary to inquire when and where this formidable disease was first recognized. In fact, its nosological history is obscure. Still, there is little doubt that Paré and Wiseman have both alluded to it in their writings; and when we consider the circumstances under which it has always been found to prevail, when it *has* prevailed in modern times, we can not but believe that since wounds were first inflicted upon numbers and those numbers collected in masses, hospital gangrene has had its share in determining the mortality that has followed. I would not have you suppose that it is in military hospitals alone that we meet with this scourge. On the contrary, we find it from time to time raging in the civil hospitals; and, in fact, Lamotte informs us that it was at the Hôtel-Dieu in Paris that it was first called "Pourriture D'Hôpital" in order that the wounded exposed to, or suffering from it should not have their fears excited by hearing the word *gangrene* applied to it in their presence.

Professor Blackman has told me that he had seen it in some of the London hospitals. But it is in military hospitals that it is most to be dreaded and where its most fearful ravages are recorded; and this, too, notwithstanding its etiology has been so thoroughly investigated and is so well understood by military surgeons. Baudens mentions that it broke out in one of the military hospitals in Africa with such intensity that every man who had undergone a great operation perished with it. We again find it prevailing to a fearful extent in the French hospitals in the Crimea, while the English were almost entirely exempt from it: in my opinion, a severe reflection upon French intelligence and another evidence of the radically wrong system upon which the French medical staff is organized.

Bonnard, a French surgeon in the Crimean war, attributes the appearance of the disease in the French hospitals to a miasm generated by the action of heat and moisture upon decomposing organic matter. He says: "In the present epidemic we have seen the first cases coincide with the accession of the summer heats; the crowding together of men; the continual disturbing of the earth; while the vicinity of the sea rendered the air very humid and saturated it with vapor, morning and evening particularly; a mass of organic detritus was spread over the ground, or buried at so slight a depth that one could literally find no spot free from the offensive odor diffused from these sources. The air vitiated in this manner produced fatal effects, and we believe it is to this we are to impute the cases of typhus and diarrhœa, the scorbutic condition almost general in all those predisposed, and finally the hospital gangrene, that at this period attacked a great number of the wounded." So, too, Salleron, in a most able memoir upon the same epidemic, remarks: "All the wounded were enfeebled and depressed by *ennui*, bad nourishment, fatigue, privation, atmospheric vicissitudes, and by all the debilitating causes that act so energetically upon the soldier placed in exceptional circumstances; more or less anæmic, more or less scorbutic, our wounded presented but feeble reactions, or none at all, and succumbed easily and rapidly to the miasmatic atmosphere that enveloped them, so to speak, in a permanent and protracted manner, in the hospitals in the Crimea as well as in those in Constantinople. Almost throughout the campaign the hospitals of Constantinople were overcrowded with sick and wounded ; these, with grave and frequently multiple lesions, which furnished a great quantity of morbid products, permanently vitiating the atmosphere of the surgical wards. Thus for two years hospital gangrene prevailed as an endemic: it made numerous victims ; it raged with a violence and intensity that is never seen in either civil or military hospitals in time of peace."

Now, gentlemen, we have here the hygienic errors that produce his as well as most other camp diseases. You are not to suppose, owever, that because heat and moisture are enumerated among the ecognized causes in the Crimea, that this plague prevails only in varm climates or seasons. On the contrary, Percy says it is most ommon in winter, while Dusaussois contends that summer is most avorable to its development. Rainy autumns find advocates among ther observers. The fact is as Nélaton sums it up : "It has been bserved in all seasons and under all temperatures from 14° below zero o 36° above, and in all climates from the northern latitudes of Eng- and to the most southerly of Spain. It is developed wherever war as given rise to the circumstances capable of producing it, and it hen shows itself only among the wounded exposed to the fatal influ- nces we have pointed out, and very rarely among those who, subjected o the same temperatures, the same season and in the same climate, re placed in less unfavorable conditions." Overcrowding of men, ilth, bad diet, unfavorable atmospheric influences—circumstances that think are all within human control, except the last,—and which ught to be and would be prevented if the sanitary control of armies ere committed to those who are capable of appreciating the threaten- ngs of these circumstances and their effects. And so far as unfavor- ble general atmospheric conditions are concerned, even these might e very considerably limited in their pernicious effects by a prudent resight that would see to it that no approach to overcrowding should ccur where these conditions are known to exist.

But why is it that the same apparent general causes should some- mes produce typhus, and sometimes hospital gangrene ? The rela- onship between the two we have seen suggested by one observer, and e shall find it insisted upon by several. Thus, Vidal quotes Delpech s believing that it is the poison of typhus itself acting upon the surface of a wound that produces the gangrene, and that the emanations from the latter reproduce typhus. Sanson calls it "traumatic typhus." Salleron says: "He has always seen the development of hospital gangrene preceded and accompanied by general symptoms which announced in an evident and positive manner preëxisting poisoning of the organism. The local affection is always complicated by a subjacent and peripheric serous engorgement, of greater or less extent, according to the seat of the wound and the organic condition of the patients. This complication, which has been so justly termed 'traumatic typhus,' has always appeared to me the local manifestation of a general pathological condition that it was necessary to attack before proceeding to the employment of topical applications; otherwise the latter were most frequently ineffectual or completely powerless."

I know that filth enough and overcrowding enough and bad ventilation enough to produce both typhus and dysentery, does not necessarily produce hospital gangrene. I have seen all these causes in operation in more than one military hospital, and still there was no hospital gangrene. It has been thus far very fortunately an unknown disease in our armies, and I can only attribute this to the want of some of the conditions that must concur in order to generate this particular virus. Thus in some instances where the other causes have existed, the heat and moisture have been wanting; in others overcrowding has happily been absent, and again, perhaps, an insufficient number of *wounded* men have been within the building to have afforded vitiated traumatic secretion enough to produce the miasm of the hospital gangrene. Quantity as well as quality of secretion seems to me to be necessary to give origin to this disease. Thus in the Mexican war, within my recollection, no building received and retained successive crops of wounded, from different battles. It was not so in the Peninsula, in the Crimea or in Africa. The poison once generated, there is no further difficulty in its propagation. I can not, however, subscribe to the opinion that it is identical with the poison of typhus,—otherwise we should have had the disease in Mexico; its close affinity I am ready to admit. Bonnard has well reasoned upon this whole subject. "It is to be presumed," he says, "that miasmatic infection produced by animal substances held in suspension in vapor, has proceeded from different sources and has undergone different catalytic transformations; several miasms have been produced, and their particular species must necessarily be shown by different signs and effects, according to their intimate nature and their mode of manifestation. If, in fact, a single miasm had been engendered, as might be supposed from an examination of the constant changes through which the phenomena of the disintegration of organic matters pass, we should not see different diseases developed under their single influence. It is not here, as in simpler diseases, when the same cause may produce different effects, according to individual predisposition ; specific causes act always in the same way, and produce general and local symptoms always similar among themselves and sufficient to characterize an epidemic. If the miasm of typhus, for instance, were the same as that of hospital gangrene, their effects would be identical. Every wounded typhus patient would have gangrene, and reciprocally every gangrenous patient would have typhus. Now this is not so. We see constantly wounds complicated with typhus without gangrene, and the latter developed without any concomitant typhoid or scorbutic diathesis."

You will observe here some discrepancy of opinion between two able observers of the same epidemic: Salleron asserting that he always saw the typhus complication with the gangrene, and Bonnard asserting the reverse. Both, however, agree as to the circumstances under which the disease broke out and prevailed, and they are certainly such as would lead us to apprehend typhus poisoning, whether it manifested itself positively in every case or not.

But, however this may be, there is no doubt in my mind that the poison once generated propagates itself certainly and rapidly, and herein it demonstrates its specific character. In ordinary traumatic mortification this is not the case ; the disease is local ; it is confined to the individual, and is always due to the mechanical obstruction of the vessels supplying the part with blood, whether that obstruction be the consequence of inflammation, of the particular traumatic injury, or what not. In hospital gangrene, on the contrary, there can be no doubt of the disease being extended by inoculation, direct or indirect, mediate or immediate. Whether the poison saturating the air of the wards is taken into the system by the lungs or primæ viæ, or whether it finds access to the system by the traumatic surface only, or both, may admit of dispute ; but one thing is certain, that this form of gangrene never occurs except where there is an antecedent solution of the continuity of the surface. Hennen says it attacked orderlies and nurses from constant exposure. Blackadder thinks he has seen several cases in which there was no preëxisting division of the skin ; but Vidal has well remarked on this point that he thinks this "an error on the part of Blackadder, and he is inclined to believe that this *surgeon has confounded* scurvy with the gangrene. It is probable he has sometimes seen scorbutic abscesses complicated with gangrene, which he had regarded as originally formed by the gangrene itself." I think this the true explanation of the matter. We have already seen from the testimony of Bonnard that typhus, dysentery, and scurvy were among the prodromata of the gangrene in the Crimea and Constantinople hospitals.

That this disease has been produced directly by inoculation we now proceed to show; and first we have the case of Ollivier, a surgeon in the Spanish army, who inoculated himself upon the arm over the insertion of the deltoid. The consequence was hospital gangrene in a few days, which was arrested only by cauterization. Next, we have the accidental inoculation of Mr. Blackadder: "Having punctured himself with the point of his scalpel in one of the fingers, while dissecting the stump of a patient who had died of this disease, the part became inflamed; a vesicle having a depression in its centre, and containing a watery fluid of a livid color, formed upon a hard elevated base. The surrounding integuments became tumefied and extremely sensible to the touch. About the distance of a fourth of an inch from the base of the tumor, a very distinct areola of a bluish red color made its appearance, and continued visible for several days. These local appearances were accompanied with general indisposition, headache, nausea and frequent chilliness, which were relieved by the use of neutral salts, pediluvium and warm diluents. The inflammation gradually subsided, but the sore had no disposition to heal. It did not enlarge externally, but was disposed to burrow under the integuments. This phagedenic disposition was ultimately got the better of by laying open the sore and by repeated applications of caustic; but it was two months before a complete cicatrix had formed, and it was upwards of six months before the part had regained the color of the surrounding integuments." (Ballingall.) Mr. Blackadder in fact considers the disease as being communicated *solely* by inoculation; but here he is certainly mistaken. Hennen, in his account of it as it prevailed at Bilboa, has furnished facts enough to refute this idea, and similar facts will be found scattered throughout the writings of most authors who have treated of the subject. For instance, Prof. Brugman says: "At Leyden, in the end of the summer of 1798, in the French military hospitals, hospital gangrene prevailed in one of the low wards, whilst the patients who had slight wounds and who were placed above this ward in a garret well aired, were found to escape the disease. The surgeon judged it necessary to make an opening in the floor in order by that means to afford an outlet to the air of the infected ward, by the roof. Thirty hours afterwards, three patients who lay next to the opening were attacked by the disease, which soon spread through the whole ward." In these cases Brugman thinks the miasm was applied directly to the sores through the medium of the atmosphere. The sores were exposed to the action of this poisoned air while they were being dressed. But you will recollect, I remarked, that whether the poison were not sometimes received by the lungs or primæ viæ, might admit of dispute. Brugman gives the following facts as bearing upon this point. He says: "In the month of August, 1805, I saw in one of the wards of a hospital at Amsterdam, four patients whose wounds showed unequivocal symptoms of gangrene. The disease did not exist in any of the other wards. The patients in the above-mentioned wards were removed, and the necessary precautions taken; none were left in the apartment but the four gangrenous patients before noticed. The number of wounded, however, became so considerable that on the following day it was absolutely necessary to place two men in that ward. These patients had each a benign ulcer situated in one above the malleolus of the left leg, in the other on the internal side of the thigh; they were dressed out of the ward, almost in the open air, and the dressings covered with a wet bladder, so that the air of the ward could exert no direct influence upon the ulcers. The dressings were carefully removed twice in twenty-four hours. Notwithstanding these precautions, the fever which precedes hospital gangrene appeared in the first patient twenty or twenty-two hours after his admission into the ward, in the second nearly thirty hours later, and both were attacked by the disease." This fact, though not conclusive in itself, still certainly sustains the idea of constitutional infection by respiration; and it still further refutes Blackadder's notion of the disease being purely local. It goes further, and taken in connection with other facts already noticed, it establishes a relation betwixt this disease and certain zymotic fevers, by showing, for instance, a period of incubation,—short it is true, but still apparent,—twenty to sixty hours. Thirty hours was the time when the hole was cut through the ceiling of the ward at Leyden. But Bonnard has extended this period of incubation to a mean period of eight days, and in some cases even to two weeks. He bases this opinion upon the occurrence of hospital gangrene among some men brought from the Crimea to a hospital at Pera in which the disease had not before existed. When the men arrived, they were in an abnormal condition, their wounds were dry and painful, smelt bad and were stationary. "*No doubt,*" *he says,* "hospital gangrene already existed, though it did not present all its characteristics till some days after their arrival." Notwithstanding the opinion of Blackadder, we can not, then, refuse our assent to the constitutional-infection theory unless we suppose that the general system may be the subject of a malignant fever, while a local lesion at the same time is the seat of a malignant and destructive prutrescence, and that the two morbid conditions are entirely independent of each other. When, however, the poison is directly applied to a traumatic surface, its effects are too palpable to admit of any dispute. The facts on this point are more than sufficient—they are abundant. The extreme subtlety of the miasm, the pertinacity with which it adheres to dressings, sponges, instruments and even to clothing worn in the wards where it exists, is almost beyond belief.

In 1797, a supply of charpie was sent from France to the hospitals in Holland. Its use was followed by the occurrence of violent hospital gangrene. Investigation showed that the persons from whom it was procured were in the habit of washing and bleaching the dressings used at Paris hospitals and selling it as new. "In the epidemic at Montpellier in 1814, the charpie having given out, it became absolutely necessary to use the least soiled of that which had been already used. Gangrene immediately became extremely common. Carded tow was then employed, and then the frequency of the disease sensibly diminished."

"While Delpech was making his first investigations of this affection, a shoemaker, who was obliged to have his thumb amputated, placed himself under his care. Every day he came to the hospital where gangrene was prevailing to have his wound dressed, but he never entered the wards. He brought with him everything necessary for the dressing. One day he was out of charpie, and Delpech covered the wound with some he carried in his dressing apron, which had been kept in the wards. The following day the usual symptoms of the gangrene appeared." In the case of a stranger upon whom Delpech had performed castration, and who lived at a distance from any focus of infection and under the best hygienic conditions, he was surprised to find gangrene develop itself. At last he discovered that the coat he was in the habit of wearing while visiting his patients, had contracted the smell and was impregnated with putrid miasmata. Pouteau accidentally wounded the ring finger of the right hand with the point of a scalpel. After dressing three patients suffering from gangrene, he himself was attacked. (Nélaton.)

But whenever hospital gangrene breaks out in a hospital or ward, whatever may have been its origin, it is sure to spread, and that without regard to age, sex, temperament or any other condition. The intemperate, the filthy, the subjects of debilitating disease or depressing emotions, may be the first to suffer, but the robust, cheerful, and well fed can promise themselves no immunity.

"Hospital gangrene," says Nélaton, "constantly declares itself upon wounds so disposed that they may be freely touched by the air or by the pieces of an apparatus. If in the extension of the same wound there are points which from their position may be protected from contact with these externals, they may escape while these favorable conditions exist; but they are attacked in their turn when these conditions are changed. Thus the wound made by a ball which has traversed the whole thickness of a limb is at first attacked by the gangrene only at the two orifices, which are converted into large ulcers, and thus permit the infection to be extended by degrees throughout the whole track of the wound.

"The disease more rarely attacks wounds which have been immediately closed; it first shows itself upon the lips of the wound; frequently the track of the silk used for ligatures after amputations exhibits a phenomenon similar to that which has been observed in the track of balls; these threads occupy in the wound that has been closed a little canal in process of suppuration; the gangrene first shows itself at the mouth of this canal, propagates itself into the interior, and from this purulent channel it extends itself to the whole wound, destroys the recent cicatrix, denudes and necroses the bone, and makes conical stumps wherever it is left to itself. Delpech, to avoid this inconvenience, cut off his ligatures close to the knots; afterwards, having no longer any external wound, he had no more hospital gangrene as the consequence of his amputations."

We proceed now to consider the mode of the invasion of the disease. We have seen that observers differ as to the occurrence of fever before that of the local affection. The weight of authority is decidedly in favor of the local affection being first in the order of phenomena. Thus Bonnard insists that the infection is purely and essentially local. Nélaton says the fever manifests itself from the twelfth to the fifteenth day. Vidal remarks: "It has been asked whether the general symptoms preceded the local, or whether they were consecutive. This question has received different replies, according to the opinion formed of the mode of action of the deleterious agent. Those who believe it acts locally have seen no general symptoms until after the manifestation of the local phenomena; the partisans of the absorption of the *miasm think that* the gangrene succeeds a disturbance of the whole economy, similar to what is termed a nosocomial fever. Thomson, who is among the latter, says if general symptoms are not observed before the gangrene, it is because they are slight and not well marked. If it is true that hospital gangrene may exist without general symptoms, it is also true that they generally occur, and that *sometimes* they precede the local phenomena, though most commonly the reverse." Salleron, as already quoted, takes the opposite ground, though I think many of the cases he has reported in detail do not sustain his views. Mr. Guthrie deals with this question, as with most others, in a very short and dogmatic, though philosophical manner. He remarks: "If this disease were entirely a local complaint caused by the application of a morbid poison, giving rise to the destructive changes described on the surface of an ulcer, it should be followed by febrile or constitutional symptoms at the end of several days only; and Delpech is disposed to think that in such cases these constitutional symptoms take place from and after the sixth day. If it were entirely a constitutional disease, giving rise to the destructive changes described as taking place upon the surface of an ulcer, the febrile symptoms should precede the changes in the ulcerated surface. That the febrile symptoms do seem to follow the appearance of the local alteration is in many cases indisputable; that they precede or accompany the local symptoms in many other cases is indisputable; and that the disease in a mild state, although yet capable of committing much mischief, is neither preceded nor followed by febrile or constitutional symptoms, cannot be doubted. The febrile symptoms themselves differ essentially when they do occur, generally partaking the character of the endemic fever prevailing in the country at the season at which they appear." And this, in my opinion, is the true solution of the whole mystery. We have seen that the circumstances in which hospital gangrene is generated are similar to those that produce typhus, etc.; and when patients with wounds or ulcers have been breathing a vitiated air of this sort before the appearance of the gangrene—that is, the first cases—they will probably have fever before their sores are attacked; but if men with wounds from a pure air are brought into infected wards, the wounds will show the effects of the poison before the constitution, whether fever appear in the course of the disease or not. When fever is the precursor of the local affection, the patient will complain of pain in the head and eyes, tightness of the forehead, loss of appetite, sometimes diarrhœa; but if this symptom occurs in the beginning, it is not persistent—constipation, sometimes obstinate, generally succeeding. Quickness of the pulse, some heat of skin, occasional chilliness, and sometimes even sweat, may be observed. The febrile phenomena, however, are not constant in their character : sometimes you may have one set, sometimes another. It is probable Mr. Guthrie was right in asserting that the endemic or epidemic constitution obtaining at the time will determine the assemblage of signs that present themselves. If any set of symptoms are to be generally looked for, they are those of derangement of the primæ viæ. In fact, Sir James McGregor looks upon these derangements "as the principal *cause* in most of the cases that occurred in one situation, and an emetic the remedy which arrested it, followed by the exhibition of bark."

The local phenomena, however, are those that can not fail to arrest the attention, and to those we now proceed. So many writers have given descriptions of these, and they all agree so well in the main, that I suppose you would hardly fail to recognize the affection if you were familiar with any one of these accounts. But as Bonnard's is one of the most recent and comprehensive, and one to which it is scarcely probable that you can have access, I shall translate and quote it almost entire. He remarks :

> "We perceive that one may easily be surprised by the appearance of hospital gangrene, and one can not be too much upon his guard during its epidemic reign. Some morning the whole wound appears to be invaded by a gangrenous degeneration more marked in certain spots, and furnishing a brown, fætid and profuse suppuration. Sometimes the lesion is dried up, resembling a rude imitation cut from a block of wood, and painted red by an unskilful hand. The wound in all cases is of its original size, how far soever the process of repair may have previously progressed. The bottom of it is in some places black, and of a deep gray tint throughout the rest of its extent. The cellular tissue forming its border is œdematous *en masse*, and gangrenous wherever visible. When the disease is not cut short, the inflammatory circle extends, the features contract and become pale, the fever increases and becomes continuous, as well as the pain, which is so intense the patient can not sleep. This pain is usually lancinating, and occupies the whole region invaded. Some patients complain of a tearing, burning pain; at the same time, in severe cases and enfeebled subjects, a typhoid condition is set up,—of slight intensity in itself, it is true, but very persistent and liable to become aggravated by the progress of the absorption, which we see manifested at a very early period. Most usually we have the opportunity of meeting the disease at the commencement of the ulceration by suitable treatment, and it is remarkable that its success is not more marked and prompt when it is applied even in resisting constitutions. The force of the localized miasm appears to set at defiance the best general conditions, and to require always for its destruction the same determinate quantity of rational means. In fact, the employment of the latter succeeds just

as well and as promptly in the anæmic or in the subject of diatheses in themselves unfavorable.

"When, from unfortunate circumstances, no obstacle is opposed to the progress of the disease, the wound soon assumes a more characteristic appearance, differing in some degree from that of its first stages by the reunion and the extension of all the symptoms.

Two forms of hospital gangrene are usually admitted—the 'ulcerous' and the 'pulpous' or 'membranous.' The ulcerous form is represented as attacking the solution of continuity in several points, and occasionally losses of substance similar to those made by a Hunterian chancre or a gouge. In the pulpous or membranous form the bottom of the wound is occupied either by a false membrane or by a detritus, the molecular aggregation of which possesses so much cohesion as to render suitable detersion quite difficult. We have not seen these false membranes in the numerous cases submitted to our observation. We do not think the pseudo-membranous exudations of blisters can be referred to a cause the effects of which are so different. The pulpous matter is more common, but we are compelled to reject all classical distinctions of this kind; their utility is very doubtful, and is not sufficient in any case to characterize the disease more precisely. The disease is *one*, and notwithstanding some slight differences there is no constant variation sufficiently well defined to enable us to distinguish several distinct forms, unless it may be in the degree of gravity in the seat of the wound, or the longer or shorter duration of the infection.

"From the moment of the invasion, the progress of the hospital gangrene is very rapid, and the energy of the treatment should be in direct proportion to the attacking force, even when at first sight it seems to be indolent and inactive: a few hours, in fact, suffice that the features of the invasion that we have described shall have disappeared completely, and shall have been replaced by all the most grave pathognomonic signs. Those parts of the body in which the cellular tissue most abounds are much sooner disorganized than the others; it is this tissue, in fact, that yields most easily to the transformation, and which serves, so to speak, as a conductor to the miasmatic agent. Its destruction, more rapid than that of the subjacent layers, is the reason why the ulceration extends more rapidly superficially than in depth, and why absorption thus favored reacts so promptly upon the whole economy. From the third to the fourth day, the red inflammatory circle extends its radius five to ten centimetres from the borders of the sore, which are crimson and tumefied; the pultaceous and dirty matter product of the disorganization is traversed by striæ of filaments belonging to the cellular web, whose cells have disappeared. The superficial aponeurosis, such as the fascia lata, contribute for their part to the formation of bridles that last for three or four days; the external planes of muscle are then denuded. The cellular spaces that separate their bundles disappear in their turn, thus giving place to those variable excavations which may have had some influence in the adoption of a particular ulcerous form. The bodies of the muscles are at length themselves invaded and progressively destroyed, from the external layers to the deepest. The alteration of the organic substances ıat we have just enumerated produces a suppuration of an entirely eculiar nature, approaching that of simple gangrene, and in relation › the catalytic modification that has determined it. An ichorous and macious liquid of a neutral tint, mixed with a great quantity of black lobules and of organic detritus still more recognizable, bathes the hole wound, which is penetrated and soaked with it like a sponge. ts profuse production and constant renewal indicate with what rapid-.y the mortification is proceeding. When the disease has not been rrested, whether from having been left to itself or from the means mployed against it having been insufficient, the power of the miasm ıcreases constantly and tends to destroy everything exposed to its ction. Now we have seen that the cellular texture is that which ields most easily; its subcutaneous position singularly favors the ropagation of the infecting cause; the edges of the wound, in great art formed of it, bleed at the slightest touch; they fringe out, become etached in spite of their thickness, and constantly lose substance hroughout their whole extent. By pressure we ascertain the changes oing on in the areolar tissue. At a distance of two or three centi-aetres from the border it causes to spring out a sanious liquid of a rick-dust color, which is effused toward the interior of the ulceration, orming isolated and numerous little drops, as if each cell had separ-tely furnished its own. The peripheric propagation has its analogue n the deeper seated parts; the intermuscular cellular tissue of the eep layers, that which accompanies and protects the nervous and vas-ular trunks, undergoes the same modification and furnishes the same lements.

"The local mortification continuing its course regularly, a vast loss f substance ensues, with a progress the more rapid, as it is already he more extended. Under the influence of lesions thus deep, and de-truction of cellular tissue within a radius greater than that of the vound itself, the inflammatory circle that bounds it tends to gain onstantly; its color, of a violet red upon the border, passes into a resher and erysipelatous shade; a little farther whole regions and imbs are thus invaded.

"Hospital gangrene having reached its last stage, life seems to ıbandon the region occupied by it and to yield to the dissolving action of the natural laws of matter; large gangrenous patches are formed ıpon the inferior parts or those kept in contact with surrounding odies; deposits and channels of matter end by making in every lirection new openings, which have all the characteristics of their in-ectious cause, and hasten its progress by the formation of new ulcers of the same specific nature. The entire region is gorged with fluids of a bad nature; it assumes enormous dimensions, from which the chorous and fætid matter is constantly oozing. If the walls of the great splanchnic cavities are affected, the termination is rapidly fatal; he internal organs in more or less immediate contact with the mias-matic secretions, speedily become inflamed, and destroy life more or ess rapidly according to their special importance. So great visible ınd tangible disorders are always accompanied, whatever may be their ituation, by the most dangerous functional disturbances. The septic

> absorption manifests itself further by the leaden discoloration of the skin, which becomes dry and earthy. Emaciation is extreme; profuse sweats occur upon the trunk and head, at every hour of the day, and without any appreciable cause. When the general infection is complete, and saturates, so to speak, the organism, irregular chills, mingled with the sweats, supervene; the appetite is completely lost; sleep disappears to give place to a coma vigil, alternating with moments of lucid waking; the prostration and sinking are so great, that the slightest motion causes the most acute suffering; the diarrhœa increases; the stools are frequent and fœtid; the pulse feeble and very frequent, (120 to 130 a minute); the patient dies, preserving to the last the use of his intellectual faculties."

This history of the morbid phenomena of hospital gangrene embodies and arranges almost all that has been said by the multitude of authorities I have had occasion to consult. It requires but little modification; still we must note that Nélaton, in speaking of the ulcerous form, remarks that "these ulcerations show themselves in recent wounds, and in those whose cicatrization is already almost completed, in the centre of the wound or near its borders. Whilst they are developing themselves, all the phenomena of cicatrization are going on regularly at points that have remained untouched, so that the processes of organization and disorganization are observed simultaneously." And again: "If the disease shows itself under the pulpous form, the wound becomes painful, the granulations assume a violet tint; a grey, semi-concrete matter is spread over their surface, and covers either the totality of the sore, or only one or more isolated points. When the false membrane is in the first place partial, by its eccentric development it speedily becomes general. Its adherence to the divided tissues is intimate. If we try to remove it by friction, it resists or is detached in shreds, and its separation is followed by a slight sanguineous exudation from the fleshy granulations. In the first place thin, semitransparent, and of feeble cohesiveness, exactly moulded upon the surface of the wound, every depression of which it shows, it soon acquires more thickness and solidity. Then it masks entirely the violet hue of the granulations, and no longer represents so faithfully the contour and irregularities of the wound. At this stage, which usually corresponds to the tenth or twelfth day of the disease, the wound becomes more painful, its borders are swollen, doughy, sometimes livid; the thick false membrane loses its consistence, softening from the surface toward the deeper portions, and the softened layers fall under the form of a slough (putrilage.) The secretion of pus, suspended during the formation of the false membrane, is now reëstabished; but the liquid discharged is no longer purulent; it is an ichorus, sanguinolent fluid, exhaling a fætid odor, perfectly characteristic."

Another important observation of Nélaton's is, that "the putrid egeneration affects in its propagation two distinct modes. Ordinarily t remains circumscribed, within a space more or less limited, and exends in breadth and depth by destroying, in the order of superposiion, all the tissues it meets with, like cancerous tumors, which are deeloped in all their dimensions and convert into their own proper subtance everything they touch. But it is not unusual to see hospital angrene depart from this simple march to assume a much more detructive one. The cellular tissue being, of all the organs, that which t most readily invades, if the putrid centre by its continual extenion reaches the large cellular interstices, the degeneration immediately akes this route to propagate itself. It then travels under the skin, nsinuates itself among the muscles, turns around the tendons, around he vascular and nervous trunks, and thus causes the greatest ravages. t almost always takes this course when situated in the ham, in the roin, the fold of the elbow or the axilla."

In connection with these remarks, I would direct your attention to he striking similarity at least, that the false membrane, so graphically escribed by Nélaton, bears to the false membrane characteristic of he worst form of diphtheria. I have no time to trace these analogies or you. They will readily occur to you upon reflection. To my ind they suggest an affinity between the poisons of the two diseases, nd may in a degree account for the fatality, frequently sudden and nexpected, that attends the latter as it now prevails.

One other point. We can not help being struck with the analogy etween the progress of the latter form, as described by Nélaton, and he pultaceous chancre. Those of you who have read Vidal's remarks pon the phagedenic pulpous chancre will readily recognize this reembiance. Vidal himself calls attention to this point, and refers to is description of that form of chancre while treating of this variety f hospital gangrene.

Hennen dwells particularly upon the rapid march of the disease and he circular form of the sore. After describing the signs of the disase, he says: "All these threatening appearances occurred within wenty-four hours, and at this period also the wound, particularly if was situated upon a muscular part of the thigh, buttock or calf of he leg, whatever may have been its original shape, soon assumed the ircular form. I have seen the external ear and the palpebræ destroyed n this manner, as if in a series of concentric circles." Mr. Guthrie also mentions the circular form and the peculiar odor as characteristic of the disease. He remarks, too, what I do not recollect having met with in any other writer, that wounds or ulcers on the legs are sooner attacked than those upon the upper extremities.

All authors call attention to the liability to relapse in this disease. A patient is never to be considered safe until the last point of denuded surface is covered with the new skin.

When the disease is suffered to go on unrestrained by the remedial measures, it spares none of the tissues or organs. We have seen that the cellular tissue is most rapidly destroyed, whether in its sub-cutaneous or deeper distributions; that muscles, arteries and nerves are denuded of their sheaths and lie exposed in the wound. But finally all yields. "Nothing is more common than the destruction of tendons." (Nélaton.) One author suggests that these organs perish of ordinary sphacelus in these cases, having been deprived of their nutrition by the destruction of their sheaths and the blood-vessels they conduct. "The largest and most important articulations are frequently penetrated and destroyed; the bones are rapidly stripped of their periosteum and necrosed." (Nélaton.) Hennen relates a singular phenomenon in this connection. "In some cases," he says, "a total absorption of the phosphate of lime took place, and the bone was converted into a cartilaginous mass. This circumstance I have met with twice, once in a diseased metacarpal bone and once in the femur. In the former case the dissecting knife cut through the bone with a little difficulty, as if it had gone through the cartilage of the ribs. The latter case was very remarkable; the patient suffered acute torture from a sloughing thigh-stump, which on accurate examination displayed the following appearances: a thickened, cutaneous texture hung like a loose pouch around a hard, projecting mass, apparently consisting of a diseased muscle, within which, corresponding to the size and situation of the bone, appeared a tough, dark body exquisitely sensible. It had been touched with escharotics, lay loosely, and on removal by a forceps had all the external appearance of a stopper of cartilage, about two inches in length." In this case Hennen amputated below the trochanter. The case was at its fifteenth day, and the disease had seemed to be stationary for the last four days. The whole mass of the amputated limb except the skin was found to be cartilaginous, retaining the shape of the bone, but no trace of bony matter except a few specks in the tube of the thickened periosteum.

Of course, when the arteries give way, alarming hæmorrhage occurs, unless nature may have plugged up their tubes by the effect of the antecedent disease, as sometimes happens. Ligatures, however, even above and at a distance from the lesion, do not promise much success; this might even be anticipated from the fact already noticed, that all solutions of continuity of the surfaces take on the destructive process when this disease is prevailing.

The *prognosis* of the disease is unfavorable, as a general rule, if left to itself. In some rare, isolated cases, as Nélaton remarks, with good and in other respects sound constitutions, the pain disappears and the small ulcerations fill up by degrees, and the wound resumes its first aspect. But in armies, or in civil hospitals when a number of men are collected in the same ward, no such favorable result is to be expected. Vidal denies that it is as fatal a complication of wounds as tetanus or phlebitis,—*i. e.*, in a given number of wounded, more men will die of the latter disease than of hospital gangrene. If we can command suitable means, and can remove our men from infected hospitals and wards, we may expect a favorable result in both cases. If, however, the original wound be grave, and of itself seriously compromises life, though not necessarily fatal, the prognosis is very unfavorable even under the best hygienic conditions. Boggie's tables show a mortality of 1 to 15, and reduced by his treatment to 1 to 131 among his wounded in Spain, most of which deaths were from hospital gangrene. Mr. Guthrie gives us some important tables showing the mortality before the local use of caustic remedies were fully adopted. The cases occurred in the hospitals in the Peninsula in the last six months of 1813. From these it appears that the number of cases was 1614—cured 980, died 512, leaving 80 under treatment. I doubt very much whether tetanus or phlebitis found as many victims among the wounded of that period.

We proceed now to the means of preventing, arresting and treating the disease.

From what has preceded, it is obvious that overcrowding of the wounded is to be carefully avoided. That abundance of pure air is by some means to be supplied to the wards, that cleanliness in all respects is to be enforced among the patients and nurses, that dressings are never, except from necessity, to be a second time employed—I mean lint and charpie (bandages may be washed and used repeatedly when the disease is not prevailing); in short, every agent that can in any way inquinate the air of a ward, is to carefully excluded, and all material saturated with pus, which cannot be perfectly purified, is to be removed as soon as possible and destroyed. But when the disease has appeared, not only are all these things to be attended to, but we must include among things to be destroyed all sorts of dressings and bandages that have been once used. They must be *burnt*, not buried. Even in the selection of fresh lint one can not be too careful. We have seen that a destructive epidemic was occasioned in the Holland hospitals by the use of charpie purchased as new in Paris; but which proved to have been revamped from the putrid dressings of the Hôtel-Dieu and other hospitals. Parsimony in dressings in this case is the most profuse prodigality. For myself I would not permit a sheet, a blanket or a bed-sack upon which a patient who had been affected with hospital gangrene had lain, ever to be used again in a ward where there was a wound or an ulcer, nor anywhere else until they had been thoroughly and repeatedly cleansed and fumigated. The use of sponges in dressing and washing the sores is inadmissible ; they are too expensive, too easily saturated with infection, certain to be carried out of the ward and to be applied to the uninfected, and thus to propagate the disease. It will be the part of prudence, also, for the surgeon in attendance to keep a particular dress for service in the infected wards, and to change it for another before entering an uninfected ward.

But an important means of arresting the disease is to evacuate the wards or hospitals where hospital gangrene has appeared. "It must not be forgotten," says Vidal, "not only that some hospitals furnish more cases than others, but also certain wards and even certain beds. There was at La-Charité a *fatal bed ;* almost every wounded man who slept in that bed was attacked with gangrene." The position of this bed near an ill-conditioned cistern was looked upon as the cause of the fatality of the bed, and no doubt with reason ; so true is it that any source of offensive matter may keep alive this subtle and destructive miasm. Hennen relies principally upon the evacuation of the hospitals to arrest the extension of hospital gangrene. He remarks : "It is therefore a duty of the most urgent kind at once to break up an establishment when any suspicious sores may occur. In civil life a multiplicity of causes may tend to obstruct this measure, but in military hospitals no such objection can possibly prevail. Tents, huts and other temporary accommodations, which the experience of a campaign sufficiently points out, are always within our reach." The latter remark is true in the field, but in cities occupied by armies it is not so easy to command tents or huts, or ground to pitch them. In these cases fresh buildings should be taken, by force if necessary, and retained until the public buildings can be thoroughly purified by repeated scrubbing, the free use of the chloride of zinc (Sir Wm. Bromett's disinfectant) and a thorough renewal of the air, and at least three or ur coats of fresh lime upon the walls.

Now as to the constitutional treatment: When a scorbutic diathesis prevails, as was the case in the Crimea, manifested very commonly by the peculiar spongy condition of the gums, sometimes by the ecchymosed spots, it is obvious that our constitutional remedies should be directed to that special cachexia; and so in dysentery or typhus. This is not the place for you to receive instruction on those points. What we have to do with is the ordinary constitutional initiation of hospital gangrene. We have already said that functional disturbance of the primæ viæ seems to be the usual pathological condition. All authors agree in the propriety of emetics and purgatives to meet this condition. Even if diarrhœa existed in the commencement of the attack, I should give a purgative of sulph. magnes., ℥j., tart. ant., gr. one-quarter to one-half. After the action of this, if the tongue remains furred, with a bad taste in the mouth and dryness of skin, a few grains of calomel or blue mass would be proper, and action upon the bowels promoted by the exhibition of a few drachms of fluid extract senna some six hours after. There is a singular discordance of opinion among authors upon the eligibility of quinia in this affection. Vidal says its constitutional exhibition is of no use, but he approves of its local application. Nélaton and Bonnard are of the directly opposite opinion. There is no doubt in my mind that it must be a valuable agent when the fever accompanying this disease is of the remittent type or betrays any sign of a malarial origin. We have seen also that insomnia is one of the most distressing accidents of hospital gangrene. Here opium, by Hennen and others, has been found of great efficiency, where the inflammatory type did not predominate. I do not doubt that even in this case the use of Dover's powder would be attended with happy results. There is nothing, however, peculiar, nothing specific in the febrile action attending this disease. Use such means of acting on the skin as your judgment may point out; being careful to discriminate accurately the type of the fever, treat it as you would the same fever if it were independent of any external local complication.

The propriety of bleeding in these cases has given rise to a good deal of discussion among military surgeons. Its great advocate is Mr. Boggie of the British army. He bled to the amount of one or two pounds, and sometimes three or four, at Bilboa in Spain, in 1813, and he gives decided testimony to its efficacy. He admits that it must be used with caution in debilitated patients, and in those who have been long in the hospital. Hennen bears testimony to its good effects in Boggie's hands. Blackadder, a few miles from Boggie, the same year, is as decidedly opposed to it. He says that in robust men, in highly inflammatory cases, the abstraction of a little blood may not be pernicious and may even do good, but that bloodletting ought to be avoided as much as possible in gangrenous phagedena, particularly when the previous injury has been extensive, such as that of a penetrating gunshot wound. Pouteau is also opposed to bloodletting. He thinks it a feeble resource, and one that ought to be employed only in sanguine temperaments. Mr. Guthrie has also but little confidence in its utility. He says he saw it apparently successful in one bad case, and fail as signally in another in the next bed. In this strange conflict of opinion one knows scarcely how to decide; but, fortunately, Hennen has given us some clue to the difficulty. I find from his record that it was not till late in the season that Boggie began with his bleedings, when from change of season the disease had essentially changed its type, as shown by the fact that the local hæmorrhages that at a former period had prostrated the patient and exhausted his strength, were now attended with marked relief. In such a condition of things I do not doubt that venesection might be proper, or rather admissible. Still I believe that we have in the tart. ant. and the veratrum viride agents equally powerful in controlling the heart's action, without to the same extent exhausting the vital powers of the patient. To these agents, then, I should give the preference. Another objection to bloodletting is, that the wound will be apt to become a new centre of infection. True, Boggie says he never saw this occur, but others have not been so fortunate. Mr. Guthrie says he has seen this result, and he wisely suggests that Boggie's assertion shows that the disease was on the decline when he instituted his practice.

The local treatment is the last, though the most important point that claims our attention. While the disease was considered constitutional rather than local, the local means suggested and used were of course feeble and insufficient; but when the local idea became the predominant, a marked improvement in the local remedies was the result. It is not necessary for me to recapitulate such topical remedies as have been found inefficient and have therefore been abandoned. I go on, therefore, at once and say that caustic applications alone are now relied upon. Pouteau, Delpech, Dupuytren, Boyer and Larrey look to the actual cautery as the heroic remedy. Strong nitric and muriatic acids, nitrate of silver and caustic potash have their advocates. Fowler's solution, tincture of iodine, perchloride of iron, have in late years seemed to supercede all other applications.

Vidal says he has seen this method succeed very well: First wash the wound well with aromatic wine or a decoction of walnut leaves. Then small dossils of lint or charpie, well saturated with nitric acid, are to be thrust into the softened tissue. It is important that the acid should come in direct contact with the living tissue underlying the crust or false membrane. The wound is then to be dressed like any suppurating wound. The cauterization is to be repeated daily, and if the ichor is abundant, the other dressings are to be removed twice a day. When the putrid covering is destroyed and healthy granulation is established, the cauterization is to cease.

Blackadder was very successful with Fowler's solution. He first washed the wound with a weak solution of subcarbonate of potash, and when partly cleansed, he took a piece of soft linen rag and pressed it over the crusts so as to make as much as possible of this adhere. He was careful to thrust the cloth well into all the sinuosities, so as to detach as much of the putrilage as possible, and to dry the wound well. Then he used the solution of arsenic, saturating pieces of lint with it, and carefully pressing them into every fissure and sinuosity of the wound. At the same time he met the gastric trouble with emetics and purgatives. There is obvious danger of the system becoming poisoned from so free a use of arsenic, and, in fact, Blackadder himself had some cases exhibiting abdominal symptoms of arsenical poisoning.

Mr. Guthrie claims a good deal of credit for introducing the use of the mineral acids as caustics; but Dr. Rollo, who wrote upon diabetes, used them and published his treatment as early as 1797. He used the oxygenated muriatic acid, nitrate of silver, nitrate of mercury, muriatic acid gas, and even strong nitric acid, if an active caustic was required. Mr. Guthrie says: "In his hands constitutional treatment and every kind of simple, mild detergent application always failed unless accompanied by absolute separation, the utmost possible extent of ventilation and the greatest possible attention to cleanliness, and not even then without great loss of parts in many instances." This induced him to use the mineral acids as caustics. He always accompanied the caustics, however, with constitutional treatment. Mr. Taylor strongly recommends the caustic use of nitric acid. The plan he adopted was: "The application of the strong nitric acid, so as completely to cut off the diseased from the sound part, or part so far sound as only to be affected with inflammation. The acid, however, required to be rubbed in with the blunt end of the probe, so that it not only destroyed the cuticle, but killed the cutis vera, and probably *the cellular membrane* underneath. The narrow yellow ring of dead skin thus formed separated like a piece of leather, generally carrying with it the whole slough, and leaving a clear, healthy surface, as well as edges to the wound. I never attempted to apply the acid to the surface underneath the slough, neither is such an application necessary. The vital seat of the disease is in its circumference, however large the area. I must admit that the disease sometimes crossed the acid boundary, and a second and even a third application of the remedy was required; but this was rare."

But we have the most conflicting reports of the effect of the actual cautery. Nélaton says the actual cautery is the most heroic and expeditious means, a single application being generally sufficient, if the iron reaches every part of the sore. The dryness of the eschar is the evidence of this, a moist spot showing that *that* point remained untouched. If the sore is in the vicinity of a large vessel, the cautery requires great boldness and prudence in the surgeon. Bonnard makes this one great objection to its use. Nélaton recommends, in cases where amputation is required, as, for instance, when so much of the soft parts of the leg has been destroyed before the disease was arrested as to preclude all hope of a useful limb being preserved, to pass the cautery over the limb at the point of amputation as a prudential measure, with a view of dissipating the subcutaneous engorgement, so as to prevent the stump being attacked with gangrene.

We turn now to Bonnard, and he says: "Escharotics and particularly the actual cautery have been employed against the deep and tenacious disorganizations, as well as to limit their encroachments. The results have been trifling and indecisive. We have seen a number of failures for one successful case." He has no confidence in any of the usual applications, or in any of those we have mentioned. His grand remedy is the tincture of iodine. On this subject he says: "Our object being to act upon all the infected surfaces, it was necessary to find a very active liquid remedy, without dangerous corrosive action, capable of penetrating everywhere, and thus bringing about a favorable change at all points. . . . The tincture of iodine had succeeded very well in superficial wounds, and its nature was adapted to the preceding indications. It was then employed in circumstances the most grave, but at first with great caution. The first quantities used were quite small; the surfaces were lightly washed with a pencil dipped in the tincture, taking care that a few drops should flow into the anfractuosities by a slight pressure of the pencil against their superior walls. The improvement was sensible as to the external parts, but it was evident that the internal had had but little share in it. We then thought it necessary to increase the dose of the tincture, and after its harmlessness was established it was poured into the deep wounds so as to fill them completely. Pledgets of charpie, moistened with the same liquid, were placed over the fenestrated lint spread with styrax, that immediately covered the wound. And to remove as far as possible all bad smell, a layer of charpie charged with camphor and powdered charcoal was placed over all, and kept in place by compresses and bandages moistened with chloride of soda. The improvement was now very manifest. The wound was cleaned off from one day to the next, and in the most complicated cases the parts had resumed their natural aspect in three or four days. This result seemed to us the more valuable in that the tincture of iodine can be used everywhere, that its application is very easy, and finally that no general disturbance of the economy was produced by its absorption."

One would suppose from this strong and unqualified endorsement of the merits of the tincture of iodine that the question was settled, and we now had an unfailing means of combatting the worst forms of hospital gangrene. But, no; far from it. Like Boggie's lancet, which failed in the hands of his next-door neighbor in the same epidemic, we find the claims of the tincture of iodine to confidence controverted almost upon the spot. Salleron, while admitting that it may be of use in a superficial lesion, and rather in a relapse than in a primitive case, says he has never seen it produce any sensible dynamic action, never any general reaction, followed by the calm and comfort that the actual cautery frequently, and the perchloride of iron almost always produces.

Salleron goes on in his memoir to examine critically and analytically all the caustics we have enumerated, discusses their advantages and disadvantages in a philosophical manner, points out the objections to their employment in some cases from their immediate danger, as in the case of the actual cautery over a denuded joint, in the vicinity of the femoral or carotid artery, etc.; in other cases, from the difficulty of controlling and limiting their action, as in the use of the caustic potass., and in all from the uncertainty and insufficiency of their results. All these difficulties, he insists, are met and obviated by the use of the perchloride of iron, while it possesses positive advantages that are to be derived from no other agent that has been yet proposed. For example, he asserts that it is less frightful, though much more painful, than the hot iron; it causes no loss of substance; it never enlarges the wound,—on the contrary, it usually contracts it by unloading the neighboring tissues; Applied to joints denuded of their soft parts, it has no pernicious effects upon the ligaments or synovial membrane; it rather promotes the absorption of any effusion into the articulation. I have not the time to go on with the long catalogue of advantages cited. I will only add that the author confesses that the pain caused by the application is excruciating to the last degree. He has even persuaded himself that this pain itself is an advantage, and objects to anæsthesia beforehand on that very account, a degree of enthusiastic logic too paradoxical for me to assent to. It only remains to give you the author's method of using the perchloride, and we have done. In the first place, the wound is to be carefully cleansed after the very manner that Blackadder directs for the use of Fowler's solution. Then a layer of charpie of one or two centimetres or even more in thickness, and at least as broad as the wound, well moistened with the perchloride, is to be applied to the traumatic surface; this to be covered with dry charpie and one or more compresses, and the whole confined by a bandage. This dressing to remain for twenty-four hours, unless in urgent cases, where it may be renewed in twelve hours. It is better, he says, to make too many, than too few applications, taking for guide first the general, and then the local condition of the case. In deep wounds or in tortuous superficial canals, debridement may be necessary, but pieces of saturated charpie are to be introduced and pushed well home. In dependent wounds with two openings, Salleron recommends to plug up the lower opening, then fill the wound with the liquid and stop up the superior opening. As improvement is manifested, the strength of the perchloride used may be diminished by dilution with water, in order that the applications may be less painful. Salleron concludes his able paper with these remarks: "But whatever may be the efficacy of perchloride of iron when this disease breaks out in war times or from overcrowding, under an endemic or epidemic form, in wounded men always more or less exhausted, I repeat that there is poisoning of the whole system; that the condition of the wound is only the local manifestation of a general pathological condition that must first be met; that isolated local medication will seldom succeed, and only in slight cases; with the perchloride, as with all other means, we must always commence with the general treatment before having recourse to the topical. And in urgent cases, where delay might be dangerous, we should institute both at the same time, in order to limit the local disorganization as rapidly as possible."

NOTE.—Since this lecture was prepared, a mild form of hospital gangrene has appeared in some of our military hospitals. To the list of remedies heretofore suggested, Prof. Goldsmith has added bromine, pure or in solution, and its effects are well spoken of. Deleau, in an able monograph on the perchloride of iron, has corroborated Salleron's testimony to the value of that agent. I would suggest a trial of the permanganate of potash in solution, proportioned in strength to the severity of the affection. But whatever form of caustic is selected, the secret seems to be that its application should be so thorough that no point of the diseased surface should escape its touch.

ART. II.

Diphtheria—A Case.

BY N. B. WELLS, M.D., LAGRANGE, KY.

On the 19th of July last, I was summoned to see a servant boy in this vicinity, æt. twelve years, laboring under an attack of diphtheria of six days' duration. He seemed to possess a good constitution ; but had been the subject of frequent anginose attacks for the last year or two. On examination, I found the characteristic false membrane formed over the tonsils, velum, and soft palate, and extending back over the pharynx and as far down as I could see. These parts were also very much swollen and reddened. The schneiderian membrane was also very much irritated, and from it he discharged large quantities of muco-purulent matter. The bowels were rather disposed to diarrhœa, though normal as to distension, etc. The pulse was 130 per minute, and rather feeble. The appetite was feeble, almost amounting to anorexia. Skin normal, though the extremities were occasionally cool. It also appeared, on inquiry, that he had some exacerbation of fever during the evenings, and remissions during the mornings. He was very drowsy, sleeping most of the time, day and night ; and while asleep was pestered with frightful dreams, causing much muscular agitation. His breathing was distressing from obstruction of the nasal passages and the pharynx. I made the following prescription, viz. : ℞. Chlor. potass., ʒij. ; hydro. chlor. acid, ʒj. ; aqua pura, ℥viij. ; tinct. chlor. ferri, ℥ij. ; quinia sulph., ℈j. Mix, ft. solut. Dose : One tablespoonful every two hours, diluted with water.

Also I directed the affected parts to be regularly mopped every two hours with spirits of terebinth. I directed alcoholic stimulus to be given during the remissions, in the form of whisky toddy, every three hours, (a tablespoonful of the whisky to be taken each dose,) and a common tea-saucerful of chicken soup every two hours. Under this treatment the case progressed very favorably up to the 23d, the redness of the mucous membrane changing from its dark malignant color to the healthy arterial; and a part of the false membrane had also begun to loosen, so as to allow me to remove it with a dressing forceps, without inconvenience.

Yet the swelling of the tonsil, etc., as above described, still remained. At this juncture, while under an accession of fever, he commenced having some epistaxis, which, however, was soon checked for a few hours; but at night, the fever coming up again, the hæmorrhage reappeared, and soon became alarming to the family, from the quantity lost. I was immediately sent for, and when I arrived, I found the blood running from both nostrils almost in a stream, and of a pale red; and from what I was told, I presume he had lost nearly a quart in the preceding two hours. I went to work bathing the whole face and back of the neck with iced water by means of rags, which, with sinapisms to the extremities, in twenty minutes put a stop to the hæmorrhage; the fever passing off simultaneously. I suspended his physic for the night, except a small quantity of chicken soup at intervals of two or three hours. I could discover no symptoms of purpura hæmorraghica in his case, or scurvy, to favor such an outburst of hæmorrhage. On examining the throat next morning, every vestige of the swelling and redness, inside, had disappeared, as also the swelling of the glands outside. The false membrane was becoming loose and sloughy. I continued the application of the spirits terebinth to the affected parts, and the use of the chlorinated solution above mentioned, and instead of the alcoholic I substituted an ounce of camphor julep every two hours, for the next three days. By this time the false membrane had entirely disappeared, leaving a couple of small ulcerated patches, quite superficial, just in front of the right tonsil. By the continued use of the turpentine, these readily healed in two more days; the pulse also gradually coming down to the normal state. I here discontinued my visits, turning my patient over to the cook.

In regard to this case, may I not say there is an important hint given us by the manifest results of the hæmorrhage from the nose? Was it a *critical* hæmorrhage, instituted by Nature for the relief of the great distension of the parts affected? If the sudden relief of the parts above noted stood as a result of the profuse hæmorrhage, may we not conclude that similar results might follow the liberal use of leeches to the parts affected, in similar cases, and thus do away with so much burning with caustics? You will observe I use the spirits of terebinth instead of caustics.

Proceedings of Societies.

Proceedings of the Cincinnati Academy of Medicine.

Reported by W. T. Brown, M.D., Secretary.

Hall of Academy of Medicine, Sept. 7, 1863.

The first meeting of the Academy of Medicine for the autumnal session was called to order at 8 p. m., the President, Dr. McIlvaine, in the chair.

The Doctor said he felt grateful to see such a large attendance on the part of the members at the commencement of the session; also that the health of the members during the summer vacation had been good, the only one (Dr. Fries) on the sick list at the time of adjournment being now with us to speak for himself.

After the reading and approval of the minutes of the last meeting, the President announced that, according to the programme, Dr. Williams would read an essay. Subject: Endemic Ophthalmia.

Dr. Williams stated that he had been so much engaged during the summer he had not had time to write a paper, but if the Academy would excuse him, he would be prepared at the next meeting. He said he would like to ask, What is strictly the object of this report? Endemic ophthalmia is not peculiar to this region, more than any other. He presumed it was intended for him to report on catarrhal or purulent ophthalmia, attended with granular lids.

The President referred him to Dr. Tate, chairman of the committee, who selected the subjects for essays during the year.

Dr. Tate said the object was to take up those forms of ophthalmia which arise and prevail in certain localities. He knew of such cases of contagious ophthalmia, and therefore thought it a proper term to employ.

Dr. Williams said he had seen many such cases alleged to be peculiar to certain districts, but such cases are muco-purulent ophthalmia. Egyptian ophthalmia is a bad term. It prevails every where, and is contagious, attended with granular lids and conjunctivitis. It is not the effect of any specific principle or virus imported from Egypt. It may arise independently of contagion, from some peculiar atmospheric influence. He thought it best to change the phraseology, and substitute in place of endemic ophthalmia the term trachoma, and if the Academy was willing, he would report on this subject next *Monday night. Granted.*

Reports of Cases.—Dr. Williams reported two cases of hay asthma. The patient called upon him on the account of the catarrhal inflammation extending to the conjunctiva. The man, a pilot, had an attack every summer, lasting five or six weeks, continuing this length of time whether treated or not. It usually commenced in July or August, and was attended with considerable inflammation of the conjunctiva, schneiderian membrane and the bronchial tubes, relief being obtained by free expectoration. The treatment he adopted in this case consisted of local stimulants and astringents to the conjunctiva, and for the irritation of the bronchia expectorants with Dover's powders at night. He also tried the inhalation of chloroform and iodine as recommended by Davis of Chicago, but with only temporary relief. The second case was that of a bookkeeper. He advised him to quit his business and go to the country, and report in a few days.

Dr. Williams also reported the case of a child, six months of age, having a small tumor situated just below the tendon of the orbicularis muscle of the orbit, of the size of the first joint of his little finger, extending along the side of the nose, cheek and lower eyelid. It was of a reddish blue tinge. At first he thought he could detect fluctuation, and there was disease of the lachrymal sac, but it was an erectile tumor,—not in the skin, but subcutaneous. It originated soon after birth, and for the last five or six weeks has grown rapidly. It was a question with him what was best to be done. It will probably extend and disfigure the child, and cause considerable difficulty. He would like to know how to proceed,—whether to make use of pressure, to ligate or extirpate the tumor.

Dr. Tate said in regard to hay asthma, that he had three or four years ago a similar case to those reported by Dr. Williams. He had seen strychnia employed, and with favorable results. He made use of it in his case with benefit.

Dr. J. B. Smith stated that Dr. Watson recommends quinia and the antiperiodics, and that Dr. Elliotson says the use of Fowler's solution in five-drop doses three times a day will cure the disease speedily. In a patient of his, while suffering with an attack of this disease in Indiana, Dr. Hibberd was called and employed the inhalation of chloroform and iodine, applied blisters, etc., with no benefit. Sanguinaria canadensis and gum myrrh made her worse. In this patient the attack comes on as observed by Dr. Williams. Dr. Elliotson calls it a sympathetic disease. Its pathology is not known. Hay, or the emanations arising from certain grasses, has nothing to do with the invasion of the attack. The disease runs an indefinite course, and gets well of itself.

Dr. Johnson said a gentleman of his acquaintance has called on him for three years in succession. Every year he looks for an attack of the disease. It usually occurs in the latter part of August. He attributes it to some odor arising from vegetation. When frost cuts down vegetation he gets well. He says he experiences a pressure when he goes to the country and comes in contact with the rag-weed. The Doctor said he had never treated him for the disease.

Dr. Stevens said the father of Mr. Dunlevy, a banker in this city, had been subject to these annual attacks for the last twenty years, until for a few years past he has taken a trip to the White Mountains and thereby avoided a return of the paroxysm.

Dr. Murphy also reported two similar cases, relief being obtained by going to the White Mountains.

In regard to the last case reported by Dr. Williams, he would suggest to him to run platinum needles, heated to a very high heat, through the tumor. He had heard Nélaton advise the practice, and had seen him try it on three different occasions. Nélaton says the continued use of the needles will reduce the tumor.

Dr. Murphy reported the following case: A young Irish boy, a clerk, went to Camp Butler, and came home sick. He saw him the next morning. He had a high fever, pulse 112, full of no great force, bowels confined, felt confused and uneasy in his head, face red, eyes suffused, tongue natural. He supposed it a malarial trouble, and prescribed comp. ext. colocynth and ext. taraxacum, and spts. mindereri every three hours; he vomited; gave him magnesia, and applied mustard cataplasms. Continued the spirits mindereri. On the third he was delirious; on the fourth, in the morning, a very fine eruption came out; thought it was small-pox. The fifth morning the whole conjunctiva was suffused with blood, both of the lids and globes, so much so as to push out the mucous membrane. Delirium continued. He stimulated him freely. He died yesterday, the fifth, at 2 P. M. The pox never filled; they turned black. He said it was the most virulent case he had seen for a long time.

Dr. Richardson reported the following case: A little boy, ten years of age, living on Cutter street. He was of a hæmorrhagic constitution; had been so his whole life; very slight injury would produce tumefaction and considerable discoloration of the surface. On Wednesday of last week his father called at his house and told him that the boy was *vomiting; that he rejected* everything. He prescribed sub. nit. bismuth and opium. The next morning, being in the neighborhood, he called, found the patient had continued to vomit all night, and complained of the right side of his head; said a woman had struck him. He examined his head carefully; found no appearance of injury, no tumefaction or abrasion. He felt disposed to reject the idea that this blow could have caused this disturbance. His pulse was less than 65, irregular and intermittent, heart's action feeble, tongue moist, eyes suffused. He prescribed liquor ammoniæ acetatis and hyoscyamus, and mustard cataplasms. The next morning (Friday) he was much the same, complaining of his head; pulse the same; bowels had been moved by syrup rhubarb. He put him on quinine and hyoscyamus. The next morning he found he had passed a bad night; his head was more painful, pulse the same, no heat of skin; he was disposed to sleep; occasionally a blush came over his face and then disappeared; no suffusion of his eyes; vomiting had ceased. He applied cantharidal collodion behind his ears, and gave him ext. rhubarb to move his bowels. The blister drew well. At 3 o'clock in the afternoon he had what the family called spasms. He called at 5 P. M.; patient roused up; his pupils were dilated; when he spoke to him he looked in another direction; left side less used than the right, eyes moved about, breathing became stertorous. After remaining with him some time he had another spasm. He felt satisfied he had been injured by the blow; that it had caused extravasation. He asked for consultation. Dr. Mendenhall was called. He had another spasm; left pupil dilated, pulse of the same character and frequency. When he came out of the spasm he was conscious and would converse; he could not see. He broke out in a cold, clammy perspiration, and died in an hour and a half after. The vomiting came on in one hour after he received the blow, indicating, he thought, extravasation of blood.

Dr. Graham reported the case of a lady forty-five years of age, the mother of six children; the youngest was nine months old. Six months after confinement her menstrual discharge came on; the next time she had a hæmorrhage from her mouth. At her last menstrual period she began to have considerable swelling about the hypogastrium; this increased in a short time so that she was as large as at full term utero-gestation. In six weeks after this enlargement commenced she had a sudden gush of blood from the womb. Her abdomen became reduced to the usual size. During the enlargement she maintained her usual strength. His attention was only required three or four days. Her system rallied rapidly. He thought such cases as this should not discourage us from abstracting blood.

Dr. Tate said he was called to attend a woman, thirty-five years of age, in her confinement with her second or third child. He was called early in the morning. Upon examination, he found the parts in good condition. Head presented high up, resting on the symphysis pubis; there was an anterior obliquity of the uterus, membranes pushed down during the pain, but the head did not advance. To correct the obliquity of the womb, he put a bandage around her, and placed her on her back. At 9 o'clock he ruptured the membranes; the head came down into the pelvis, and remained there until 3 P. M.; pains were harassing. She observed that in her former labors her physician gave her ergot. At 3 P. M. he gave her an infusion of half a drachm; her pulse was 80; that of the child 144. In a few minutes her pains came on violently, and continued for twelve minutes. The child's pulse, at a quarter before 4, was 64, and becoming more feeble. The parts being well lubricated, he delivered the woman with forceps. The child was of a deep blue color, having suffered a good deal from the interruption of the functions of the placenta. The mechanical influence of ergot is great, but he was not satisfied of its poisonous effects.

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Extract from the Proceedings of the Royal Medical and Chirurgical Society, London.

Observations on Sterility in Man, with cases.—At a meeting of this Society in August, T. B. Curling, F.R.S., Surgeon to the London Hospital, and Examiner to the University of London, read a communication, the object of which was to show that a want of aptitude to impregnate may coexist with the capacity for sexual intercourse; or, in other words, that man is subject to *sterility* independently of *virility*.

The author states that sterility in man may arise from the following causes:

1. Malposition of the testicles.
2. Obstructions in the excretory ducts of the testicles.
3. Impediments to the escape of the seminal fluid.

1. *Sterility from malposition of the testicles.*—The author remarks that the opinion of John Hunter "that when one or both testicles remain through life in the belly they are exceedingly imperfect, and probably incapable of performing their natural functions," is corroborated in a remarkable manner by the facts adduced in this paper. After describing the condition of detained testicles, the author states that the question to be considered is, whether a testicle that has not passed into the scrotum can secrete a fertilizing fluid. He assumes, as

quite established, that to contain this property the semen must contain zoosperms.

Having referred to the observations of Professor Goubaux on horses, and to those of Follin and Godard on man, the author remarks that the proofs adduced by these observers were not sufficiently cogent and numerous to establish the law that cryptorchies are infertile; and it could not be expected that assent should be given to results so remarkable and unexpected without evidence of the most convincing character. Opposite opinions continue to be entertained, and have recently been avowed by Dr. Alfred Taylor.

The author gives the particulars of two cases of double detained testicle in married men (cryptorchies) without children; and also two cases of single detained testicle, the second testicle, in one case, being completely atrophied, and in the other having been removed by operation. In all four cases the copulative powers were satisfactory; but the ejaculated semen was destitute of spermatozoa. The author gives a table, which includes these four cases and five others, three described by Godard, one by Puech, and one by the President of the Society, making nine in all, in which the fluid ejaculated by men with retained testicles was submitted to examination and found to be destitute of spermatozoa. In confirmation of the results obtained in these cases, he deduces some observations made upon the lower animals by Messrs. Goubaux, Follin, and Godard; and he furnishes a table of eight cases in which the fluid found after death in the substance of a retained testicle—in the epididymis or vas deferens, or in the vesicula seminalis on the side corresponding to the misplaced gland—had been examined and found destitute of spermatozoa. They have not been discovered after death in the spermatic ways of a detained testicle in any one instance that he knows of.

The facts which have been brought forward as opposed to the conclusion that cryptorchies are sterile, are chiefly instances in which they are reported to have procreated children. Three cases are cited: one recorded by Mr. Poland, another communicated by Mr. Cock, and a third by Mr. Durham. The author feels no little hesitation in calling in question the claims to paternity in these cases; but remarks that as yet no case has been found in which a retained testicle has been fully proved to be capable of secreting a fertilizing fluid. The observations collected in the paper seem sufficient to show that, as a rule, they do not; and though he sees no valid reason why there should not be exceptions, still the evidence is wanting to establish the exception in either of the instances of reputed paternity which have been mentioned.

2. *Sterility from obstructions in the excretory ducts of the testicle.*—After giving a brief account of Gosselin's researches, in which he showed that after attacks of gonorrhœal epididymitis the channel for the semen is temporarily and sometimes even permanently obstructed, causing, when the epididymitis is double, sterility, three cases occurring in his own practice of permanent obstruction in the epididymis of both testicles in married men whose wives were barren. In all the patients had vigorous powers; but there was a total absence of spermatozoa in the ejaculated fluid. The author insists on the importance

of careful and prolonged treatment in cases of epididymitis to obtain the removal of inflammatory effusions.

The author remarks that the passage of the semen from the testicle may be prevented by congenital absence of the vas deferens, which, if double, would occasion sterility. A case of the kind, in which the testicles were sound, had been observed by John Hunter.

The excretory duct of the testicle is liable also to be interrupted by tubercular deposits in the epididymis. It is well ascertained that this part is much more frequently the seat of tubercle than the body of the gland, and is often extensively diseased, whilst the substance of the testicle remains sound. The author gives a case in point, in which the semen was destitute of spermatozoa.

3. *Sterility from impediments to the escape of the seminal fluid.*—It is well known that a close stricture in the urethra so completely interrupts the passage of the seminal fluid, that in ejaculation it regurgitates into the bladder, where it mixes with the urine. In erection of the penis, the urethra becomes narrowed, so that a stricture which offers but a slight obstacle to the flow of urine may under congestion be sufficient to impede the emission of semen. The author has grounds for concluding that sterility from chronic stricture in the urethra exists to a greater extent than is commonly supposed. As the condition is one which is in most cases remediable, it is only necessary to call particular attention to it as not an uncommon source of infertility.

The author alludes also to a case in which he had reason to conclude that sterility was consequent upon inflammation and abscesses near the prostate gland, occasioning obliteration of the ejaculatory canals.

Two important and delicate questions arise out of these inquiries: 1. Whether a man who has the inclination and power to copulate, but who is nevertheless sterile, is justified in contracting marriage? 2. Whether this condition is a sufficient ground for divorce?

That a man who is unable to fulfill the command, "to be fruitful and multiply," is right in disappointing the hopes and periling the happiness and perhaps health of a woman, can not, the author thinks, be maintained by any casuist, and in some of the cases related in the paper he has felt it his duty to give advice in accordance with this opinion.

It can not be doubted that in women ready for conception, frequent sexual excitement without impregnation is very likely to prove injurious to health, and the author shows from the writings of Dr. West that diseases of the ovaries and uterus originate from this cause.

The second question is one upon which a surgeon is scarcely called upon to pronounce an opinion. But the author ventures to remark that as sterility in woman is not considered an adequate cause for divorce, so the man ought not to pay such a penalty for unsuspected unfruitfulness.

The President then related several cases bearing on the paper. A gentleman, aged thirty-four, had been married eight years to a healthy wife. He had strong sexual desire, and frequent intercourse, with abundant emission, but no family. He died of tumor in the groin, which was found after death to have been due to encephaloid disease of a retained testis. The other testis, which was also retained, was of the natural size, but did not contain any spermatozoa. Unfortunately the disease had extended to the bladder, so that the condition of the vesiculæ seminales could not be made out. In a second case, not under his (the President's) observation, a gentleman whose testes were retained, and who had frequent intercourse with his wife, ejaculated a transparent fluid, but it did not contain spermatozoa. A gentleman, thirty-four years of age, whose testes were undescended, had frequent sexual intercourse and free emissions, but the fluid, which was examined four times, did not contain spermatozoa. This gentleman was desirous of knowing if he ought to get married. He (the President) tried by an operation to bring it to its natural position, but did not succeed. He subsequently removed it. It did not contain any spermatozoa.

Dr. Webster said the subject discussed by the author of the paper just read was of much interest, and he believed with him that sterility oftener depended upon males than females. In support of such an opinion, he would refer to nearly 300 married men within his own acquaintance who, during their matrimonial state, never begot any offspring, excepting one instance, where a child was born after the mother had remained barren during fifteen years. In the list kept by Dr. Webster no person was entered until the parties had lived together for at least five years; and, although he never investigated the matter so scientifically as Mr. Curling, there appeared little doubt the fault mainly depended on the male, since various females who continued childless throughout their first marriage, upon contracting a second became mothers; whereas, there only occurred, in reference to the opposite sex, the solitary example already mentioned. It might, however, be added as curious, that a large proportion of the sterile individuals Dr. Webster had thus recorded were medical practitioners; and, moreover, what seemed also rather singular, seven of these couples lived in a thoroughfare having the same designation, but with different numbers of their respective residences. Regarding the chief cause of barrenness in the various illustrations to which Dr. Webster referred as coming under his immediate observation, none having been patients, it was impossible to speak definitely; nevertheless, as analogous cases are not uncommon, the inquiry mooted by Mr. Curling was important, both medically and in its social relations, besides bearing specially on questions of jurisprudence.

Mr. Wyatt asked if any of the gentlemen Dr. Webster spoke of had suffered from spermatorrhœa in youth.

Mr. Acton was pleased to think that the subject of sterility had been brought before the Society, thus proving that the affections of the reproductive organs were at length occupying that professional attention which their importance demanded; and he hoped that their treatment would never be again tacitly given up to the quacks, but pass into the legitimate domain of science. In the presence, then, of this professional neglect, it was not surprising to find so much public ignorance existing on the subject of the paper—a subject, it must be admitted, still requiring much original investigation. He (Mr. Acton) was indisposed to allow that only three causes of sterility existed. The following was not of uncommon occurrence: A young entire horse, who has been a sure foal-getter, has, say, forty-five mares put to him; none of these mares became strutted (as it is called). Here was sterility on a large scale, and opened a wide field for inquiry as to whether the cause was obesity or sexual exhaustion from previous seasons' covering—causes which he had fully dwelt on elsewhere as commonly influencing sterility both in man and beast. It might, then, be consolatory for the medical husbands alluded to as having no family to know that the profession did not consider that they must necessarily suffer from undescended testes or epididymitis—the result of old gonorrhœa. After all his experience, he (Mr. Acton) was disposed to think that the childlessness of many women did not depend upon the fault of the husbands, but upon the fact that some of the canals appertaining to their own reproductive organs were blocked up either temporarily or permanently. Practically, it was found that too often the opinion of the profession was not asked by patients before marriage. The saddest cases met with in daily practice were those of previously strictly continent men, who married, and then learnt for the first time that they were incompetent to their marital duties; it was then that the medical man was first called in, and his opinion asked as to the cause of sterility. The answer was not such an easy one as had been assumed. The reason arose from many social causes, which could not be given on the present occasion. If it was truly stated that modern accoucheurs were of the opinion "that frequent sexual excitement without impregnation was likely to prove injurious to healthy women," he must join issue with them. That the modern civilized lady was very subject to uterine or ovarian disease he would admit; but to attribute these ailments to such a cause as that above alluded to was not founded on observation, seeing that so many single young ladies were as great, if not greater, sufferers than the married, though sterile. He must likewise raise his voice against the assertion that epididymitis was a frequent cause of sterility, seeing the number of instances of young men who had been affected with this ailment who afterwards had families. In treating of the causes of sterility, he would assert that the prognosis was not so unfavorable as had been stated. The Fellows of the Society must be aware of numberless instances of temporary sterility yielding to proper remedies, thus proving that the affection did not depend alone upon mechanical impediments to impregnation, but, like its kindred condition, impotence, was a frequent remediable affection.

Mr. Fergusson said he was disappointed that in a paper by a gentleman of so great experience as Mr. Curling, so little evidence could be brought forward on the subject. He then referred to malposition of the testes as a cause of impotency, but it had long been known that where the genital organs were imperfectly developed the great probability would be that the sexual vigor would also be imperfect. He should like to have heard more evidence brought forward as to the condition of the ejaculatory tubes in cases of this kind. He then went *on to speak of the effect of* inflammation of the ejaculatory tubes interfering with sexual power. He also alluded to the fact that sometimes, though rarely, they were injured in the operation of lithotomy, and related an instance in which a gentleman, seventy years of age, complained seriously of loss of sexual power after the operation ; and another instance of the same defect in a younger patient. He said that although both testes might be affected by orchitis, generally only one was attacked, and the absence of one testis had very little to do with sexual vigor. In reference to Dr. Webster's statement, he said that he (Mr. F.) knew a lady of most perfect development who had had two children, and then became a widow. She then married a widower who had also had two children by his first wife, but this second marriage was not fruitful. Mr. Curling had also omitted to ascertain the exact time when the fluid examined had been emitted.

Mr. Curling had heard that the President was in possession of some facts bearing on the points in his paper, and had applied for this information some weeks ago, in order that his communication might be rendered more complete, and he regretted to state that the President was not disposed to assist his inquiries, and did not reply to his application. He had, however, included in a table one of the cases which had been mentioned, and which had already been communicated to the Pathological Society. With regard to Dr. Webster's remarks, that sterility was more common in men than in women, he could express no opinion, for there were no data to enable him to form one. He had little to say in reply to the observations which had fallen from Mr. Fergusson and Mr. Acton. Mr. Fergusson had missed altogether the real point of the paper, which was on sterility, and not on impotency. Mr. Fergusson mentioned that we were well acquainted with the fact that persons with small, undescended testicles were impotent; but there was nothing new in that. But in the cases which he (Mr. C.) had brought forward in his paper, the subjects of this infirmity were not impotent ; they were only sterile. He had listened attentively to Mr. Fergusson's lengthened remarks, and he could discover nothing which bore in any way on the paper, which had evidently not been understood by the speaker. He might also make the same remark as to the observations of Mr. Acton. He quite agreed that sterility after epididymitis was not common, because to produce sterility the obstruction must exist on both sides. Mr. Acton doubted whether sexual excitement without impregnation produced any injurious influence on the health of the woman. Mr. Curling had the authority of Dr. Tyler Smith and Dr. Priestley, as well as of Dr. West, from whose work he had quoted, for saying that diseases of the ovaries and uterus originate from this cause. Mr. Curling had not laid claim to originality, but from a large experience he had been able to produce some important facts bearing upon a delicate subject, at present involved in obscurity, and respecting which it was extremely difficult to obtain reliable information.

Correspondence.

Vital Statistics of the African Race.

[We have received the following communication from Dr. Howe, which, as it explains itself, we give in full, and commend the whole matter to the thoughtful consideration of such of our readers as are situated to give any response to its inquiries.]

A Commission has been appointed by the Government to inquire into the condition of the colored population emancipated by the President's Proclamation and by the Act of Congress, and to report what measures are necessary to place them in a condition of self-support and self-defence, with the least disturbance to the great industrial interests of the country. This Commission are seeking to ascertain the vital statistics concerning the African race and the Mulattos, as well in the Northern and Middle as in the Southern States. It is very important that this should be done; but, unfortunately, the data do not exist.

It is not known, from any wide circle of observation, whether the mulattos are as fertile as blacks and whites; whether they are long-lived; nor even whether their breed can exist permanently,—that is, whether its hybridity will prevent its persistence.

Then there are questions about the adaptation of the cross breed to the northern parts of the temperate zone; questions about the effects of amalgamation upon the white race, and the like.

The Commission have sent out Circulars to many medical men; but, of course, will not reach all who might, if called upon, give valuable aid. We, therefore, print the series of questions put forth by Dr. Howe in behalf of the Commission, and invite the attention of our readers to it.

Those who are disposed to answer the queries, or to favor the Commission with their views upon the general subject committed to it, are invited to address Dr. Samuel G. Howe,

143 Second Avenue, corner of East Ninth St., New York.

QUESTIONS.

1. What is the number of the colored population of your town?
2. About how many pure blacks?
3. About how many mulattos?
4. Does the colored population, if not recruited by immigration, increase or decrease?

5. Do mulattos seem to you to have as much vital force to resist disease and destructive agencies as pure blacks, and as whites; and do they usually live as long?

6. To what diseases do mulattos seem peculiarly liable?

7. Do mulatto families usually have as many children as white families?

8. Can you give instances, within your own knowledge, of the number of children in one family born of, and reared to maturity by, mulatto parents?

9. Are the colored people generally industrious and self-supporting, or not?

10. How is it in the second generation with regard to the number and health of offspring?

11. Through how many generations has any family of mulattos been known to persist?

12. Do the mulattos seek public charity in greater or less proportion than whites?

13. Do you consider them, upon the whole, as valuable members of the community, or not?

Trephining in Epilepsy.

Editors Lancet and Observer:—In the report of the Proceedings of the Academy of Medicine, published in the September number of your journal, Dr. Murphy is reported to have stated that "Dr. Blackman has abandoned the use of the trephine for the cure of epilepsy." Dr. Gans also stated that "he was at St. John's Hospital the other day when a patient was brought in who was a subject of epilepsy. Dr. Blackman sent him away, refusing to operate, notwithstanding there was a large depression!" As Dr. Murphy was present when I made some clinical remarks on the surgical treatment of epilepsy, he must have received an erroneous impression from the observations I then made. Although my experience, like that recorded by Prof. Gross, in trephining for epilepsy has been unfortunate, I do believe that general statistics on this subject warrant the operation. I regard the proceeding, however, as one of the most serious character; for in many instances, as in those on which I have operated, there has been not merely a depression of bone, but such adhesions or penetration of the dura mater, that the elevation of the bone necessarily inflicts a most dangerous wound. In my clinical lecture I was anxious to impress upon the minds of the student, and the young practitioner, that the operation was not one to be undertaken without the most serious consideration; but when idiocy or death seemed imminent, it would then become justifiable. Very respectfully,

Cincinnati, Sept. 22d, 1863. GEO. C. BLACKMAN.

P. S.—I hope to prepare a paper on trephining the cranium, for ›ur next number. G. C. B.

Letter from Boston, Massachusetts.

BOSTON, MASS., Sept. 10, 1863.

MESSRS. EDITORS :—The twentieth *Registration Report* of Massachusetts for 1861, has been received. The "Summary Results" are from the pen of Dr. A. A. Gould, who prepared the first two reports for the years 1842 and 1843. The observations and statistical tables are highly instructive, not only to the statistician, but to the person of medical culture. The report comprises 168 pages, but space will allow only to glean here and there a few of its interesting facts.

The number of births for 1861 was 35,445, being 606 less than in 1860. There were also 1,017 still-births. Compared with the annual average of the five preceding years, there is a decrease for 1861 of 707 births. The daily average of births is 97. One child was born alive to every thirty-five persons living ; while, if we add the stillbirths, it gives less than one birth to thirty-four persons living. In England and Scotland the rate is one birth to every thirty living persons. The rate differs in this State : in Suffolk county it is one in thirty-two, in Dukes one in sixty-one persons.

The returns show a preponderance of births in the last half of the year, and also in the third quarter.

Of those born alive 18,286 were males and 17,078 females ; 81 not stated. Of the stillborn 532 were males and 398 females ; 87 not stated. Statistics from various countries in Europe show that there are born 106–109 males to 100 females. The excess of males over females among the stillborn is very apparent in this State. In 1862, in Boston, there were 131 males to 100 females. In Providence, from 1856–62, the average was, males 136, females 100. It is so in Europe. Dr. Gould says : "There is a popular notion which may have some foundation in fact, as popular notions usually have, that the size of the head is greater, and its ossification more advanced, in the male than the female ; and hence the perils of parturition are greater." The idea "that a larger proportion of males is derived from illegitimate than from normal births," is refuted. "The rate of increase of births compared with the rate of reproduction," as being modified by premature delivery, resulting from accident or otherwise, is discussed. Mr. Whitehead deduces from the British registration that of the whole number of actual conceptions not more than one-half are born alive at the full period. "In 1853 the excess of births of American parentage *over those* of foreign parentage was 2,793, whereas in 1861 the excess of births of foreign over those of American parentage was 1,512,—a difference of 4,305.

Marriages.—In 1861 there were 10,972 couples, or 21,944 persons, married. The daily average of marriages was thirty. The ratio of persons married to the number of persons living was 1·786. Compared with the annual average from 1856–60, there is a decrease for 1861 of 710 persons married. The same fact holds good in other New England States, that there has been a diminution in the number of marriages for the last eight or ten years.

The greatest number of marriages occurred in the last part of the year, November being the most fruitful month, and March the least so ; there being 1,168 in the former, and in the latter 590—a difference of 578. For six previous years the difference was greater.

The highest marriage ratio in any county was one marriage to eighty-two persons living ; while the lowest was 0·63 in 100 persons living. The average rate in the State for nine years was one to every 123 persons living. 8,621 bachelors were married to the same number of maids ; 450 married widows ; 1,267 widowers married maids, and 571 widowers married 571 widows. For the year, 818 more widows were married than widowers. Most of the widows who married bachelors were younger than the widows who married widowers. Nine widows married under twenty years of age. One female of twenty married a youthful man of eighty ; and three under twenty-five took parental partners of sixty and sixty-five. In one instance of second-marriage, both parties were under twenty. Of the whole number of men, eighty-three per cent. had not been previously married, leaving seventeen per cent. who had once entered Hymen's circle. Of females, ninety-one per cent. entered wedlock for the first time, and only nine per cent. had been widows. Ninety-six per cent. of the bachelors married maids. Of 457 couples represented in one table, thirty females married males younger than themselves. The youngest couple married was aged sixteen and fifteen years. One female of twenty-four was married to her consort of eighteen, and one man of forty-three found a blooming bride of seventy-one. Although there has been an increase of births among parents of foreign origin, there has not been the corresponding increase in the marriages. It has been conjectured, however, that the clergy are not inclined to make all the required returns.

Deaths.—There were 24,085 deaths in 1861, aside from the 1,017 still-born. This was an excess of 1,017 deaths over 1860, notwithstanding the absence of so many citizens in the army, and the freedom from any particular epidemic. It also exceeds by 2,718 the average for the five previous years. The death ratio is one to fifty-one persons living. For the years 1852-61 it was one in fifty-four.

Several very interesting tables are given from the *Census Abstract* for 1860, showing the death ratio in the different States and Territories of the Union; and how the mortality is modified by the natural features of the country. As illustrating the extremes, in Arkansas there was one death to every forty-eight inhabitants; while in Oregon and Washington Territories one death occurred in 237, and one in 228 inhabitants. The average for the whole country was one death in seventy-nine—1·27 per cent. of the whole population. This same diversity applies equally to different portions of this State.

August and September are considered the sickly months, and June the healthiest. "This does not follow," says the report, "that the fatal months are the most unhealthy ones, for many of the fatal diseases, put down to these months, might have been contracted during the previous months."

In regard to sex, there were 11,877 deaths of males, and 12,151 of females. The death ratio has been usually larger among females than males. While in England it is the opposite; and the Census of the United States exhibits the same excess of male over female deaths. Twelve persons died in 1861 whose ages were each over 100 years; the oldest was 104, colored; had been a slave fifty years.

The deceased among the foreign element has been relatively diminishing, which is contrary to the general opinion. In 1861 the deaths among Americans amounted to 83·20 per cent. The number of female deaths exceeded that of males in about the same proportion in Americans and foreigners.

An enumeration of the causes of death is made, and some very interesting deductions are given, as pertaining to the true causes of mortality. No deaths are accorded to abortion, hydrophobia, lightning, disease of pancreas, or strictures of any kind. Only ten deaths are attributed to worms—showing that the popular faith in worms as a cause of death is fast losing its hold on the community. There were thirty-three deaths from small-pox; alcoholism, 122, against 165 the year before; diphtheria, 643, the fatality being greatest among females, while in croup it is among males; dysentery, 532, exceeding the number in 1860 by ninety-one; typhus fever, 980, or one death in forty-eight from all specified causes, of which 514 were males and 476 females; measles, 209, against 223 in 1860; of these 93 were males and 116 females, while in 1860 the opposite was true; nearly all were under five years of age, while five cases were returned from sixty to eighty; scarlatina, 1,137, against 916 in 1860, and 1,103, the average for seven years. There was an excess of females over males. The warm season seemed the most fatal this year; 799 cases were under five years; none are returned over fifty. In erysipelas there were 94 males and 100 females; croup, 461; males 233, females 226; unknown, two. This number is much less than for 1862. Cholera infantum, males 657, females 606. Consumption, as usual, heads the list in the number of deaths; 4,845 were recorded. Dr. Gould has availed himself of the census returns to illustrate the etiology of this disease in the United States, arranging the States in the order of greatest fatality; and the proportions range from one person in 254 in Massachusetts, to one in 2,498 in Oregon, while the percentage of deaths from all specified diseases range from 29·90 in Maine to 3·86 in Arkansas. The researches of Dr. Bowditch in this State are also quoted. The number of deaths from pneumonia was, males 658, females 608: fifty-three less than in 1860. The deaths from casualties of all kinds were 974, nearly the same as in the causes of death from violence. But I can not pursue the subject further, and will refer the reader to the report itself, when, at his leisure, he can digest its well-filled pages. B.

EATON, OHIO, September 2d, 1863.

Editors Lancet and Observer:—I will with your permission make a few remarks *en passant* of the health of our locality. Eaton, the county seat of Preble, is situated on the east bank of Seven Mile Creek, and contains about fifteen hundred inhabitants, who do not differ in size, good looks, morals, or other remarkable traits, mental or physical, from the other small towns of the "Buckeye State." We have, I suppose, the *usual variety* of disease that "flesh is heir to" here as elsewhere. The oracle uttered a long time ago is in full force and executed to the letter: "The way of the transgressor is hard!" We have no class of diseases that could be strictly classed as endemics; still we have in the spring and fall a few cases of remittents, in all their protean forms, or "masked batteries" (as a gentleman observed the other day).

Last spring we had a very fatal epidemic, which made its appearance about the first of February. The disease was characterized by severe cerebral disturbance. It was termed by some of the physicians as *cerebro-spinal meningitis.* There was evidently congestion, or serous effusion at the base of the brain, as many of the patients were affected with persistent opisthotonos. One patient has lost entirely the sense of hearing. One patient died in less than twenty-four hours with symptoms of apoplexy, flushed face, stertorous breathing and insensibility, aged about fourteen. In other cases, the disease lasted from eight to ten weeks before proving fatal. Most of the protracted cases died apparently from exhaustion, which was the result of loss of nerve force, more than organic change in the vital organs themselves.

Of the treatment, bloodletting practised early in the disease seemed to be the most beneficial. I did not learn that a single case proved fatal where bloodletting was early and efficiently practised. The other treatment was such as the fancy or the preconceived opinion of the practitioner, founded on his pathological notions, or the particular school he attended, in the form of sinapisms, purgatives, cupping, blisters, etc., and by others, infinitesimal doses of the "mother tincture," aconite and other "moonshine" fixings done up in three glasses of water, a dose out of each alternately. Of course, the patient did not get well.

I commenced this "irregular" epistle with the intention of mentioning the use of glycerine as one of the most soothing and best applications that I have ever used in some cases of erysipelas. I have a case now under treatment that seemed to be very much benefitted by its use. I previously used nitrate of silver, with very little apparent benefit; in several other cases I have found that it gave great relief after sulph. ferri in solution, tinct. iodine, and other reputed remedies had failed. Twenty-five or thirty years ago I was very much in the habit of using unguentum hydrargyri, as a local application, with (as I thought) benefit; but Eberle, I think, said that auxungia cerata was just as efficacious. From these circumstances I was led to the use of the glycerine, as it was an excellent lubricant, and probably possesses soothing properties.

Truly yours, R. Woody.

Mortality in England.—In the ten years 1851–60, the annual mortality in the districts comprising the chief towns was 24·57 per thousand living; in the districts comprising the small towns and country parishes 19·77: in all England 22·24. The deaths of males *averaged 23·18 per thousand*; of females, only 21·34.

Reviews and Notices.

Transactions of the State Medical Society of Indiana, at the Thirteenth Annual Session, held in the City of Indianapolis, May 20, 21, 1863.

The Transactions of the Society of our great sister State of Indiana, for the present year, has been on our table for several weeks, but we have only had leisure to make a cursory examination of its contents—not to read its papers carefully through, as they appear evidently to deserve.

Ohio and Indiana are so intimately related by good neighborhood, social and domestic ties, and a general community of interests, as to seem the same great and growing commonwealth, as indeed they are truly " parts of one." The relations between the members of the profession in the two States have always been intimate and familiar; we believe these relations are becoming more thoroughly blended year after year. Medical gentlemen from this State find it exceedingly pleasant to mingle with the profession of Indiana in their annual deliberations at Indianapolis, and we are very happy to greet our Indiana friends at our June meetings at White Sulphur Springs; all this is exactly as it should be.

In the volume of Transactions before us, we have first a somewhat lengthy but very excellent address from the President, Dr. Hibberd, of Richmond, taking for his topic the well-known couplet of Pope,

> " Know thou thyself, presume not God to scan ;
> The proper study of mankind is man."

The address is adapted well enough to the occasion ; it is, however, sufficiently discursive, being physiological, philosophical, and social. As we have already said, we have not read it carefully enough to speak more critically or fully.

Next we have a good paper on " *Cinchona, and the extracts from it*," by Dr. W. F. Harvey, of Plainfield, Hendricks Co.

Next a report on *Puerperal Eclampsia*, by Dr. T. B. Harvey, also of Plainfield. Without wishing at this time to open up the discussion of this subject, which has been freely considered from time to time in this journal, we quote the conclusions of Dr. Harvey, as they are the result of a very careful study of several cases in his own practice, and the comparison of quite a range of statistics in the practice of intelligent medical gentlemen.

"1st. Uræmia is the cause of about ninety per cent. of all convulsions of pregnancy.

"2d. Coma is more frequently produced by serous infiltrations and uræmia, than by congestion of blood in the brain.

"3d. Bloodletting is not admissible in a large per cent., from its tendency, in a remarkable degree, to aggravate the disease, and reduce the chances of recovery. It is often practiced with no appreciable good or bad results. It is not relied on alone in the best examples for its exhibition.

"4th. Chloroform is admissible in all cases, and beneficial in nearly all. In those not benefitted by it, no injurious effects are observed.

"5th. Hydragogue cathartics are followed by more uniform, permanent good results than any one remedy—a fact deduced from the detailed history of almost every case on record.

"6th. Opium and its preparations are frequently attended by the happiest influence.

"7th. In uræmia, threatened with eclampsia, and not relieved by treatment, or when the fœtus is dead, artificial premature labor to be induced.

"The pregnant female, with albuminous urine, to be under the *special* care of the physician."

Dr. Brown, of Lawrenceburg, gives a paper detailing some interesting observations in camp diarrhœa. These observations are the result of personal inspections of the soldiers in camp and hospital in and about Nashville, during the last January, under the special order of Gov. Morton. Dr. Brown also in the same trip on return had the charge of a boat-load, two hundred and twenty patients, from Nashville to Cincinnati. Dr. Brown is one of those observing, practical and acute practitioners whose views are always worthy of attention.

Altogether, the Indiana State Medical Society is a strong, efficient, and working body of men, for whom we entertain the sincerest esteem.

The Nature, Causes and Treatment of Nervous Deafness: Translated from the French of "Duchenne." With additions by LAURENCE TURNBULL, M.D., Lecturer on Aural Surgery, etc., etc. Philadelphia: Lindsay & Blakiston. 1863.

This neat and unpretending little volume before us is devoted to the consideration of a group of diseases of the ear, for the relief of which most of us do very little that is rational, or indeed generally of any real avail. The chief point in the little book is to demonstrate a large number of cases of deafness resulting from nervous defect, and to show the therapeutic value of localized Faradisation or electric excitation upon these cases, as the author styles them, of nervous deafness. His mode of operating is as well and briefly expressed as can be in his own language. We, therefore, quote a few paragraphs:

1. *Operative Procedure.*—The following is that procedure, as described in my memoir of 1851, upon the chorda tympani nerve. The head is bent so as to place the external auditory canal in a perpendicular direction. We inject into the canal as much water as will half fill it, and into the liquid we plunge a metallic thread, taking care not to place it in contact with the membrane of the tympanum, or with the walls of the auditory canal. That which is produced by the slightest movement of the head or of the hand that holds the thread, causes a sharp pain at the moment of the passing of the current. That the patient may be spared that pain, I have got M. Charriere to construct for me an auricular rheophore, in which the conducting metallic thread is insulated by an ivory envelope, and can not penetrate to the membrane of the tympanum. Having waited until the noise has ceased that is produced by the impression of the liquid upon the membrane of the tympanum, we place the auricular rheophore in connection with one of the conductors of an inductive apparatus, (or magneto-electric,) and we close the circuit by placing upon the mastoid process the other wetted rheophore, which itself communicates with the second conductor of that apparatus.

The inductive apparatus which serves for this experiment is appropriate to the delicacy of the organ upon which it acts—that is to say, that the minimum of its power must be scarcely appreciable when the metallic rheophores are applied upon the extremity of the tongue, and that it must be in our power to graduate it with precision and upon a scale of great extent.

2. *Electro-Physiological Phenomena.*—I will exhibit the series of phenomema which I observed each time that I subjected myself to the preceding experiment. I have seen them, in general, repeated on the subjects on whom I have experimented.

The rheophore being placed in my auditory conduit, which was previously half filled with water, and the apparatus being at its minimum, as intimated above, I perceived at the very moment of the intermittence a small, dry sound, like the crackling of parchment, which I could quite clearly trace to the bottom of the external auditory conduit. The intermittences having occurred with extreme rapidity, those sounds approached to the likeness of those made by the beating of a fly's wings between a pane of glass and a curtain. The intensity of the little sounds which I have just described increased in direct proportion to the increase of the current. That sensation was perfectly limited to the point at which the sound appeared to originate. After a certain time of excitation, and at a certain degree of tension of the current, I very plainly felt a kind of tickling in the right side of the tongue, at the junction of its posterior third with its middle third. Still gradually raising the force of the current, I felt the tickling sensation as gradually progressing toward the point of the tongue, where I then experienced a numbness and a disagreeable pricking, which did not go so far as actual pain.

The experiment, of which I have described the effects, is often followed by a numbness, and sometimes by an increased and excessive sensibility in the anterior two-thirds of the edge of the tongue, which last for a long time. It also appeared to me that my tongue was drier, and, as it were, rough, like a grater, on the side that was operated upon.

Such are the phenomena that first struck my attention, and which have subsequently been described, almost precisely in the order that I have indicated, by patients whom I have subjected to that experiment. But I have still to make known a phenomenon of high importance, which very frequently manifests itself when the excitation is sufficiently energetic; it is the production of a special gustatory sensation. That phenomenon is the last that attracted my attention, no doubt because it is marked by the accompanying sensation of tickling or pricking. And accordingly it will pass by almost unperceived, unless the experimentor be attentively watching for it. Although that gustatory sensation may be but little decided, it may be perfectly distinguished, and for my own particular part, I have felt it so very clearly that I can compare it to a metallic sensation.

Finally, some subjects receive at every intermittence a luminous sensation—the electric flash—on the excited side.

Without sparing the space for his physiological, and, perhaps, we might properly say philosophical deductions and reasoning, we select a case which will in some sort still further convey an idea of the therapeutic indication and importance of this plan of treatment in the hands of the author.

Case 5.—Double deafness, complete on the left, (consecutive upon an eruptive fever,) existing for sixteen years, and having resisted injections of the Eustachian tube, and the perforation of the membrane of the tympanum. Cure by the Faradisation of the motor muscles of the small bones, and of the chord of the tympanum.—Emmanuel Glayray, aged twenty-six, a native of Arvier, Piedmont, became deaf, after an eruptive fever, when he was about nine years old. In his own country, he was subjected to various modes of treatment, but without success. In January, 1856, he came to Paris to obtain the aid of a surgeon-aurist of great reputation. Injections into the Eustachian tube were made during several weeks, and as they produced no improvement, perforation of the membrane of the tympanum was next resorted to. This operation being equally unsuccessful, the patient was advised to renounce all further treatment.

It was under these circumstances that, in 1856, he consulted me. I ascertained that his hearing was entirely lost on the left, and was extremely weak on the right; on closing the right ear, he could not hear any sound, how loud soever it might be. He did not perceive the ticking of the watch, when placed in contact with his ear. On the right, it was necessary to speak to him quite near his ear, and in very loud tones. On that side, he heard my watch at a few centimetres of distance. He complained of continual buzzings and whistlings, stronger on the left than on the right, and, finally, he stated that he had been in that state from the ninth year of his age. The most attentive examination did not enable me to discover any organic lesion.

The Eustachian tube and the auditory conduit were perfectly free, which, indeed, had been recognized by the practitioners by whom he had previously been attended. I immediately Faradised his ears in the manner previously described, and, during the operation, the patient spoke of the sensations habitually attendant upon it; but said that they were much less decided on the left than on the right. That first operation made no improvement in his condition. It was not until after the third that he began to hear the voice on the left side, and to distinguish the ticking of my watch when in contact with his ear. The various intraäural sounds, which had diminished after the second Faradisation, now, after the third, entirely disappeared. He heard equally well on the right; for I could converse with him, in my ordinary tone of voice, from one end of my study to the other.

The succeeding operations, performed three times a week, produced a progressive improvement, and after the tenth he heard in a satisfactory manner, and as well on the left as on the right. He could readily maintain conversation, and he heard my watch, on both sides, at a very considerable distance. He returned to his own country, whence several months afterward he wrote me the intelligence that his cure still continued.

Forming an appendix to this translation from Duchenne is a paper by Dr. Turnbull, of Philadelphia, on nervous deafness, read before the Philadelphia County Medical Society. It gives Dr. Turnbull's views and experiences on this obscure and important subject, embracing remarks on the character, etiology, physiology, pathology, diagnosis, treatment, etc., etc. The little volume is very interesting and worth reading. It may be had sent to any address, free of postage, by sending thirty-eight cents to the publishers, Lindsay & Blakiston, Philadelphia.

The Physician's Visiting List for 1864, published by Lindsay & Blakiston, is already on our table. The convenience and excellence of this pocket companion is accorded in the fact of its almost universal use by physicians, especially in city and large village practice. We call attention, however, to an advance in the scale of prices rendered necessary by the advance of labor and material. Twenty-five patients—cloth, 62 cents; Ditto—leather with tuck, $1.00. Fifty patients—flexible cloth, 75 cents; Ditto—leather tuck, $1.25. Interleaved editions for country practitioners' use, and for record of cases, are prepared, at additional extra rates. The Visiting List can be had at any of our bookstores.

Editor's Table.

Medical Schools.—The time is at hand for the commencement of the winter labors in our medical schools, and in this number of the *Lancet and Observer* will be found the regular announcement of faculty and programme of teaching in several of the leading schools of this country, to which the attention of our readers is especially directed. It will be seen that in the venerable University of New York the same old Faculty of distinguished men are announced as ready for another campaign, while its vigorous young rival of the Bellevue Hospital Medical College presents an imposing array of working men, well known to the profession of this country as well as abroad. Representing our own city of Cincinnati, the Faculty of the Medical College of Ohio remains unchanged and will enter on its winter course with Monday, the 2d day of November. Some slight changes are seen in the Faculty of the Cincinnati College of Medicine and Surgery, the winter term commencing October 27, with preliminary lectures two weeks previous. It will be seen also that there is a moderate advance in the price of tuition. So far good. We hope professional opinion will compel that and all other schools to come up to a rate that will be a respectable price for services rendered.

The Academy of Medicine resumed its weekly sessions on the first Monday evening of September. The sessions open with a decided manifestation of interest, and the prospect is that the meetings will be attractive and profitable. We give in our present number the proceedings of the first meeting. At the next meeting Dr. Williams gave a very interesting report on trachoma, or granular lids, which will be furnished for the *Lancet and Observer*, we presume, by our next issue.

Death of Dr. West, of Indiana.—The papers announce another death in the ranks of the prominent Indiana physicians. Dr. C. West was one of the best known, and amongst the most industrious medical men of that State. Thus, one by one, are rapidly passing away those we have been long accustomed to esteem and confide in. Dr. Hibberd has thoughtfully forwarded a notice of Dr. West, which will be found elsewhere. We wish it were a more general custom to prepare at once the suitable memoir of our deceased brethren. The immediate medical friend or relative should see to this at once. During the past year Ohio has lost an unusually large number of her leading medical men; some have fallen at the post of duty in the service of our country, and yet our annual volume of Transactions of the State Society is just passing through the press without a single obituary notice!

Pyœmia in Vegetation.—Our printer has a quick appreciation of a scientific point. He remarked the other day that he was obliged to break the Sabbath by filling up its time in secular employment. The good Lord had sent a heavy frost on his sweet-potato field the night before, and he was obliged to take care of them at once for fear the roots would absorb pus from the vines and take on fatal pyæmia.

The Income Tax to be paid by Physicians.—The Committee appointed at the last meeting of the Medical Association of the District of Columbia have obtained the information with regard to the Income Tax, embodied in the following letter:

TREASURY DEPARTMENT, OFFICE OF INTERNAL REVENUE,
Washington, June 11, 1863.

GENTLEMEN:—Your letter of this date has been received, and contents noted. It is asked whether an assessment for Income Tax is to be made upon collections during the year 1862, for professional services rendered during that year and previous years, and whether an estimate of unrealized or contingent income due for services rendered in that year ought to be included? I answer, that the assessment should be made upon all collections during the year 1862, without regard to whether the services were rendered during that or previous years. If any profits made during that year and uncollected, remain uncollected when they might have been readily realized, and with a view merely to avoid the assessment of the tax, they are to be considered as collected, and assessed accordingly; for no evasion of the liability of the tax-payer of his duty under the law should be allowed to profit him. But merely contingent profits, uncollected, the sum not ascertained, remaining open for adjustment, are not liable to assessment.

2d. As to "expenses necessarily incurred in carrying on any trade, business or profession," physicians can not be allowed the wear and tear of horses, carriages, and harness, any more than they can of their own constitutions, or of their health, necessarily injured in the practice of their vocation; but any incidental expenses, such as the feeding of horses, hire of servants, and such like, are to be deducted from their income.

Very respectfully,

JOSEPH J. LEWIS, Commissioner.

H. LINDSAY, M.D., C. H. LEIBERMANN, M.D., W. P. JOHNSTON, M.D., Committee.

Revenue Decision—Physicians' Expenses.—The following decision has just been made by the Deputy Commissioner of Internal Revenue:

Washington, Aug. 15, 1863.

Sir:—In reply to yours of the 13th inst., enclosing communication from Dr. ——, I have to say that the amount expended by a physician for the keeping of a horse used exclusively in the business of his profession, is a legitimate deduction from income. Very respectfully,

Edward McPherson, Deputy Commissioner.

G. P. Putnam, Esq., Collector of Internal Revenue.

Advertising Nostrums Once More.—As we have recently had considerable to say on this topic in this journal, we take great pleasure in giving place to the common sense and manly editorial remarks of the *Philadelphia Presbyterian*. It is truly refreshing to see the editor of a newspaper, especially a religious and family weekly, rise above the paltry consideration of how many dollars and cents will be affected by the rigid adherence to right and a principle in the face of the temptation to add materially to its exchequer.

> "Advertising.—The circulation of our paper is so extensive, that we are often earnestly solicited, under the promise of lucrative remuneration, to admit into our advertising columns matters of such doubtful morality as at once to meet with a positive refusal. We can not so nicely discriminate, as to be at all times certain that advertisements admitted speak truly, since the disposition to exaggerate is very common; but there are cases where we have no hesitation in rejecting the claims of advertisers. The secular, and sometimes the religious, press are made auxiliaries to the basest impositions. As, for instance, when an advertiser offers books below the usual price, and at the same time some article of jewelry gratuitously, to the purchaser, we know there must be intended deception; for how could such a trade be prosecuted by the seller without ruin to himself? Or if an advertiser, with seeming fairness, promises for a few postage stamps to disclose a secret of great value—perhaps for the promotion of health, or for valuable farm purposes—we conclude that he is playing upon the credulity of others, and reject his offers.
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> "In the case, too, of empirical medicines, we refuse to be coadjutors in circulating deceptive information. Any one who will run his eye over the columns of the secular press, should be persuaded that there is much deception and positive falsehood in these pretensions to secure certain cures for every ill to which the flesh is heir. If these secret remedies had only half the efficacy which is claimed for them, it is a marvel that so many die. Some of these remedies may possibly be adapted to some cases of disease, but in the general they must prove hurtful, and not unfrequently fatal. Those who tamper with their own constitutions, and refuse skilful medical advice, may take, and often do, those quack remedies to their own grievous hurt. So far as we are concerned, we will not be instrumental in nursing their delusive

hopes, by advertising that which we have reason to fear will prove injurious to our readers. If these secret remedies should meet the eye of our readers elsewhere, we urge them to distrust them utterly, believing as we do that in most cases they are deceptive, and calculated only to do harm."

Down the Lakes.—Many of our doctors try to find time and a few spare dollars to run away from the treadmill duties of professional life for a few days during the heated term of summer. During this season a few of our friends made the Lake Superior trip, and report a delightful experience. To such as wish to journey eastward, we commend the route embracing from Niagara Falls, via Lake Ontario and down the St. Lawrence, thence to Montreal, or across southward to Albany by way of Lake Champlain, as part of their trip either going or returning. The steamers touch daily at Lewiston, making all the important places on both American and Canada sides, in the trip, passing amongst the delightful scenery of the Thousand Islands; and as part of the excursion we advise to stop over for a few days at some point on the St. Lawrence, as say Alexandria Bay, and have a good time fishing for pike and muscalonge. Whoever takes this trip next summer in obedience to our advice, will most certainly vote us thanks for the pleasant recreation suggested.

To Correspondents.—Dr. J. A., of Michigan: We know of no better work on Surgery for your purpose than Erichsen. Bowman's Medical Chemistry will probably suit you as a small hand-book on Analysis.

Hospital Cars.—The U.S. Sanitary Commission have just completed, at the L. M. & C. and X. R. R. shops, in Columbus, three cars, designed to run to Chattanooga, or as far as communication may be open, and bring to Nashville or Louisville sick and wounded soldiers. Each car contains twenty-four stretchers, which can be taken to where the soldier may be wounded, and placed upon it and taken to the car; and India-rubber springs are so arranged that he can be placed in position upon his bed, fastened to the framework at the side of the car, without change until he arrives at his destination, and then can be removed on the same stretcher without changing his position. Each car contains a washroom, stove, lounge, easy chair and culinary apparatus. The beds are furnished with mattresses, etc. This is an arrangement greatly needed, as all know who have witnessed the usual way of removing wounded from the battle-field, placing them into common box cars, upon the hard floor, oftentimes without anything but a hard blanket to lie upon. The Hospital train follows the Express train.

Photography and Murder.—Again we see going the rounds of the secular press a serious account of the steps taken in a neighboring State to secure by photographic processes an impression of the eye of a murdered person, in order to have a view of the murderer, it being the theory that the image last presented to the retina of the deceased will be repeated in the photograph. We copy from the *London Lancet* of last August a pertinent editorial on this matter; remarking that the absurdity is not new, and notwithstanding its very absurdity, will from time to time be continually the subject of renewed investigation, success crowning the laborer about the same time that the philosopher's stone and the elixir of life are discovered:

> Photography and Murder.—Under this singular and ominous title an absurd correspondence has been going the round of the journals, and has been accepted in some quarters as conveying solemn truth of serious import. A Mr. Warner, photographer, on reading an account of Emma Jackson in St. Giles's, addressed a letter to Detective Officer James F. Thompson, informing him that "if the eyes of a murdered person be photographed within a certain time after death, upon the retina will be found depicted the last thing that appeared before them, and that in the present case the features of the murderer would most probably be found thereon." The writer exemplified his statement by the fact of his having, four years ago, taken a negative of the eye of a calf a few hours after death, and, upon a microscopic examination of the same, found depicted thereon the lines of the pavement on the slaughterhouse floor. This negative is unfortunately broken, and the pieces lost. Mr. Warner states his opinion that the subject is of too great importance and interest to be passed heedlessly by, because if the fact were known through the length and breadth of the land, it would, in his estimation, tend materially to decrease that most horrible of all crimes—murder.
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> Mr. Thompson, superintendent of detectives, replies in similarly solemn style, capping the marvellous information of his correspondent by a detail of circumstantial accuracy. He says: "The secret you convey in your letter—photographing the eyes of a murdered person—is one of the greatest importance, but unfortunately it is unavailing in this instance, for various reasons, three of which I will give you: 1st, life had been extinct some forty hours prior to my seeing the body of Emma Jackson; 2nd, the eyes were closed; 3d, a post mortem examination has been made, and she has been buried—shell coffin—since Monday last. In conversing with an eminent oculist some four years ago, upon this subject, I learned that unless the eyes were photographed within twenty-four hours after death no result would be obtained, the object transfixed thereon vanishing in the same manner as an undeveloped negative photograph exposed to light."
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> The multitude of reasons given by the sapient superintendent of detectives for not attempting an absurd impossibility will remind his readers of the forty reasons of the mayor for the town-gunner not firing

a salute, of which the first—namely, the absence of powder—was held to be sufficient. The information derived from the eminent oculist is singularly interesting. But, before attempting the photographic feat which is suggested, Mr. Thompson might find useful practice in endeavoring to subtract the sound of a flute from a ton of coals, or to draw out the moonshine from cucumber seeds. *Quid vetat ridendo dicere verum.* Mr. Warner has hoaxed himself, and the superintendent of detectives takes the name of oculist in vain. "Stone walls do not a prison make," and the bars on Mr. Warner's photograph were not akin to the pavement of the slaughterhouse. Mr. Thompson may assure Sir Richard Mayne that such a photograph taken more than twenty-four hours after death will succeed as if taken two minutes after —and no better.

The Surgeon-General's Office.—Some significant changes have taken place in the Surgeon-General's office during the past week. In the first place an announcement was made to the effect that Surgeon-General Hammond had been ordered to proceed immediately to inspect the sanitary condition of the armies and army hospitals in the Southern and Southwestern Military Departments, viz.: at Charleston, Hilton Head, Key West, Ship Island, New Orleans, etc. Assistant Surgeon-General Joseph R. Smith was announced as Acting Surgeon-General in the meantime. In a few days, however, another order sends Assistant Surgeon-General Smith to St. Louis, and the recently appointed Medical Inspector-General, Joseph K. Barnes, U. S. A., has been assigned to the performance of the duties of Surgeon-General. What disposition, if any, has been made of Assistant Surgeon-General R. C. Wood, of the Western Department, headquarters at St. Louis, has not as yet transpired, though we shall not be surprised to hear of his appointment to a more prominent position than the one he has so ably filled at St. Louis.

The Surgeon-General's office seems to have been taking calomel and tartar emetic in *alterative* doses!—*Med. and Surg. Rep.*

Form for Civil Surgeons.—A friend has handed us the following, which we put in the way of "preservation":

In these days, when "forms" are required for almost everything connected with the military service, the following letter may serve as a guide to civil surgeons and physicians in certifying to the disability of furloughed soldiers. It will do to preserve:

Mr Kent Sir

I would respectfully represent to your honor that William H. Radebaugh, private in Company K 68th O V is still sick and unfit for duty be much afflicted with hepar-adiposum virchour or an enlargement of the liver also Hydrops peribardii hydrocardia dropsa of the heart and now difficultas intestinohum dysenterai this is a correct statement of his case as I Certify he is now under my treatment and it will be an act of justice and charity to extend his furlow he is willing and anxious to go to the regiment as soon as able

If you be so kind as to send me a New furlow for him so as to prevent all uneasiness on his part

J. H. Graser, M.D.

The Sanitary Commission.—On Tuesday, September 1st, Dr. J. A. Douglass, Associate Secretary of the Sanitary Commission, sailed for Charleston Harbor from New York, on a tour of observation and inspection. The Sanitary Commission at Morris Island is also represented by Dr. N. M. Marsh, who has labored faithfully and industriously in providing for the wants of the sick and wounded soldiers there.

The Sanitary Commission is still supplying the wounded at Gettysburg with delicacies. The patients are reported to be improving slowly. The good work is in charge of Rev. Gordon Winslow, Chaplain of Duryea's Zouaves (Fifth New York Regiment), who is unremitting in his attentions to the sufferers under his care. It is expected the hospitals at this place will be continued for two or three months longer, owing to many of the more severely wounded cases not being in a condition to be removed.—*Med. and. Surg. Rep.*

Anecdote of Baron Larrey.—In a charge of British cavalry at Waterloo, Colonel Weymouth, whether impelled by his own bravery or by some other cause, did not stop till he found himself amidst some French cuirassiers. He then endeavored to ride back, but he was pulled off his horse and wounded. One Frenchman levelled his gun at him, and was taking deliberate aim, when a French officer humanely knocked the gun down with his sword. He then addressed Weymouth in broken English and in a kind tone of voice. He also took a penknife out of his pocket, and said, "Look at thees canif, what you call penknife—Cockspur-street, Londres. I was in your country." It was Baron Larrey. The British officer, who had previously been fighting under the Duke of Wellington in the Peninsular War, would have entered the next world on the 18th of June, 1815, if the Surgeon-in-Chief of the French army had not interposed to save his life. He is at present residing in this land of good cutlery, deservedly esteemed by a large circle of friends.—*London Lancet.*

Action of Solar Rays on Exposed Intestines.—At the meeting of the Academy of Medicine of Paris on the 16th ult., M. Sappey read a report on a case of severe wound of the abdomen. The patient was a shepherd boy, aged eleven, who was gored by a bull, and to such an extent that the stomach, spleen, and a large portion of the intestines were protruding. Being far from any help, the poor boy lay for two hours with the viscera just mentioned exposed to the action of a broiling sun. Dr. Patry found the patient in this pitiable state; and, by dint of care and perseverance, the boy recovered. His medical attendant seized, however, upon this opportunity to watch the mechanism of vomiting, and found that the phenomena succeeded each other in the following manner:—Contraction of the diaphragm—vermicular contraction of the stomach, commencing at the pylorus and running from the latter to the cardiac orifice—forcing of the liquids contained in the stomach toward the œsophageal opening—energetic contraction of the œsophagus—involution of the stomach at every effort—dilatation of the cardia under the influence of the longitudinal fibres of the œsophagus—finally, filling of the latter canal by the liquids coming from the stomach, and vomiting.—*London Lancet.*

Surgery and Silver.—In a recent issue of the *South Carolinian* we find the following advertisement: "*Silver Plate Wanted.*—To be converted into caustic for the use of the sick of the army. Eight dollars per pound will be paid for all prime plate. Old spoons and old plate will answer the purposes of the medical department as well as new. Apply at Medical Purveyor's office, opposite Congaree House.

J. J. Chisholm, *Sur. and Med. Pur., C.S.A.*"

—*Med. and Surg. Rep.*

A New Method of Auto-Ophthalmoscopy.—M. Giraud Teulon has lately submitted to the Academy of Medicine of Paris an instrument composed of two plane mirrors inclined one upon the other at angles of ninety-six degrees. The objective lens of the ophthalmoscope is placed before one of the mirrors, and before the other an ordinary ophthalmoscopic mirror. The left eye is then put in contact with the left mirror and the lens, the right eye with the ophthalmoscopic or the mirror of the right side. A lamp is now placed on the right, as in ordinary exploration, and the auto-examination of the right eye is then very easy. M. Giraud Teulon has used the instrument upon himself with great success.—*London Lancet.*

Sulphur Rendered Soft.—A young German has discovered that, by the addition of a small quantity of iodine, pure sulphur is rendered perfectly soft, and may be formed into thin leaves as flexible as wax.

Army Medical Intelligence.

During his absence, and until further orders, Surgeon-General Hammond is relieved from the charge of the Bureau of the Surgeon-General at Washington, and Surgeon J. R. Smith is assigned to duty therein as Acting Surgeon-General.

Surgeon-General Wm. A. Hammond, U.S.A., left Washington, D.C., for the Departments of the South and Gulf, on Sunday, the 29th August.

Acting Surgeon-General Joseph R. Smith, U.S.A., for the last fourteen months chief executive officer in the Surgeon-General's Bureau, has been reported and assigned to duty at St. Louis, Mo.

Medical Inspector-General Joseph K. Barnes, U.S.A., has been assigned to duty as Acting Surgeon-General during the absence of Dr. Hammond, in conformity with the Act of Congress, approved July 4, 1836.

Assistant-Surgeon Samuel Adams, U.S.A., has been ordered to report in person without delay to Surgeon-General W. A. Hammond, to accompany him to Hilton Head, Headquarters S. C., and the Department of the Gulf.

Surgeon William H. Church, U.S.V., Medical Director of the Dept. of the Ohio, has been granted thirty days' leave, with the permission to tender his resignation at the expiration of his leave.

Surgeon A. M. Speer, U.S.V., has been assigned to the charge of General Hospital, Main Street, Covington, Ky.

Surgeon S. S. Mulford, U.S.V., has been ordered to proceed without delay to Hilton Head, S. C., and report in person for duty to Surgeon H. R. Wirtz, U.S.A., Medical Director, Department of the South.

Dr. G. Stegman, of Missouri, has been appointed Surgeon of 6th U.S. colored troops; Dr. W. A. McCully, of Ohio, Surgeon 2nd U.S. colored troops, and J. R. Weist, of Ohio, Surgeon 1st Regiment U.S. colored troops.

Assistant-Surgeons H. L. W. Burritt, Gerhard Saal, and Robert McGowan, U.S.V., to report to Major-General Burnside, commanding Department of the Ohio, and by letter to Assistant Surgeon-General Wood, at St. Louis, Mo.

Assistant-Surgeons M. H. Salisbury and J. C. Norton, U.S.V., recently appointed to report to Major-General Rosecrans, commanding Department of the Cumberland, and by letter to Assistant Surgeon-General R. C. Wood, at St. Louis, Mo.

Assistant-Surgeon John D. Johnson, U.S.V., has been relieved from duty in the Middle Department, and ordered to report in person to Major-General W. S. Rosecrans, commanding Department of the Cumberland, and by letter to the Assistant Surgeon-General at St. Louis, Mo.

In view of the active operations in the Department of the South, the following medical officers have been ordered to repair without delay to Charleston: Assistant-Surgeon Marsh, U.S.A.; Assistant-Surgeon Hilley, U.S.A.; Assistant-Surgeon Morrison, U.S.A.; Assistant-Surgeon Wyncook, U.S.A.

Surgeon G. Grant, U.S.V., has been relieved from duty at Evansville, Ind., and assigned to duty as Superintendent of Hospitals, at Madison, Ind.

The Medical Department has received intelligence of the death of Surgeon B. Darrach, U.S.V., at Vicksburg, Miss., in July last.

Medical Inspector John M. Cuyler, U.S.A., has been ordered to assume control of the Medical Inspector-General's Department.

Surgeon David J. McKibbin, U.S.V., has been assigned to duty in charge of General Field-Hospital, Stevenson, Ala.

The appointment of William Forbes as Assistant-Surgeon 18th Ohio Vols., has been revoked, there being no evidence of service rendered the Government.

Surgeon Charles H. Crane, U.S.A., **has been assigned to duty in** *the office of the Surgeon-General.*

Surgeon Wm. Varian, U.S.V., has been relieved from duty as Medical Director, District of the Cumberland, and assigned to the charge of the General Field-Hospital, at Cowan, Tenn.

The resignation of Dr. Frank H. Hamilton, U.S.A., Medical Inspector, has been accepted by the President, to take effect August 29, 1863.

Surgeon John L. Le Compte, U.S.V., has been appointed Medical Inspector, vice Hamilton, resigned.

The following Assistant-Surgeons have been recently appointed Surgeons in the Volunteer corps: Wm. Watson, Richard Lloyd, W. Grimsted, J. H. Currey, and Nathan P. Rice.

Assistant-Surgeon F. Floyd has been ordered to the Department of the Tennessee.

Assistant-Surgeon B. D. Wilson, U.S.V., has been ordered to the Department of the Gulf.

Assistant-Surgeon G. S. Courtwright, U.S.V., has been ordered to the Department of Ohio, and is placed in charge of the Convalescent Hospital at Hickman, Ky.

Assistant-Surgeon J. K. Rodgers has been ordered to the Department of the South.

Assistant-Surgeon Alexander Collar, 24th Michigan Volunteers, has been honorably discharged on account of physical disability and for absence without leave as reported on the rolls of his regiment.

Surgeon T. P. Gibbons. U.S.V., has been honorably discharged the service of the United States, in conformity with General Order No. 100, of 1863, from the War Department, he having been absent from duty over sixty days.

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Editorial Abstracts and Selections.

PRACTICAL MEDICINE.

1. *Sarracenia Purpurea in the Treatment of Variola.*—By A. N. McDowell, M.D., U.S.A., of Ironton, Mo.

Symptoms of Variola.—The patient complains of severe pain in the limbs and lumbar region; when the eruption appears the pain is relieved, and the patient will often remark that he is well. There is soreness of the fauces. If you examine, you will find the eruption appearing in the throat and more advanced than upon the skin. These are diagnostic marks; you see them in every case. If you have diarrhœa in the outset of the disease, the prognosis is very unfavorable.

Is it a sthenic or asthenic disease? As I have seen it, and as it occurs in our army hospitals, it most certainly belongs to the latter class, and calls for tonic and stimulating treatment.

Prognosis.—What is the prognosis? If the disease be recognized at first, and properly treated and nursed, not to have the patient put off in a pest-house, without fresh air and perfect ventilation, and seldom, if ever, prescribed for, and then by a physician looking in at the window; but prescribed for and attended to as any other disease, the prognosis is not unfavorable. A physician who neglects a small-pox patient is a disgrace to the profession.

Out of sixty-two cases treated by me, many of them very malignant cases, I have only lost three.

Treatment.—My cases are all treated as if the disease were of an asthenic type, using stimulants freely; give the patients lager beer, ad libitum; it is generally very cooling and grateful, and relished well by the patients, and when taken with a relish they all lived; also, whisky freely, in milk-punch, but I prefer beer if it can be obtained.

Diet to consist of eggs and milk. The only medicine used was the sarracenia purpurea. It was prepared according to the following formula (I used the leaves, as I could not get the root): one and a half ounces of leaves to one quart of boiling water, boiled down to one and a half pints, and administered, one wineglassful every six hours.

The first case in which this remedy was used, the patient was unprotected by vaccination, and had been several months at this hospital acting as nurse. He was taken with violent symptoms, sharp pains in the chest, great difficulty of breathing; in fact the symptoms were more those of pleuritis. When the eruption appeared, we determined to use the infusion of sarracenia, assuming that if its exhibition in this case was successful, it might be a useful remedy. Our prejudices were against the remedy, but it soon proved its efficacy; the eruption came out well, but instead of proceeding to suppuration, as usual, it began to dry up; the swelling was much diminished, because there was much less irritation, and the secondary fever much milder and of short duration; in fact, all the symptoms were greatly mitigated, and in a short time, instead of scabbing off with the usual fever and great irritation, the scales peeled off like bran. An old nurse in attendance remarked, "Why, Doctor, what is the matter with this patient? he acts altogether different from other small-pox patients; he is scaling off, and every day when I make his bed I find about two handfuls of scales, like bran!" We watched the case closely and were delighted; in fact, we were satisfied of the triumph of the remedy.

Will it prevent pitting? Let the medicine speak for itself. Two females were ordered into our hospital by the post commander, both sick with small-pox; one had been sick for two weeks; to this one I gave no sarracenia; the other one was in the second day of the eruption; neither had ever been vaccinated. To the latter I administered sarracenia with the same effect as in the case first described. The one who took none of the infusion was pitted fearfully, in fact, was scarred; the skin of the other was smooth, and in a short time every vestige of variola disappeared. Let me compare those who took no sarracenia with those who did, and mark the difference. Having had some cases under treatment before I obtained the remedy—severe cases of variola confluens—there was great swelling, much irritation and suppuration, and prolonged suffering, with great puffiness of the hands and face. On the contrary, those treated with the infusion of sarracenia, had no suppuration, the irritative fever was very slight, and the long and tedious stage of scabbing was passed over by the quick process of scaling.

Surely a remedy that will so hasten, alleviate, and mitigate the sufferings of patients and prevent such terrible disfigurement, should not be laid aside.

Of the three who died, two left camp on a drunken spree, and having a quantity of whisky, and fearing to return to camp with it, they determined to finish their debauch, and took refuge in a deserted shanty in which a female had died the day before of confluent small-pox. They laid down upon her bed in the midst of the filth, and there remained drunk for two days and nights; neither had been vaccinated, and both had variola maligna. From the time of their admission into hospital both had bloody diarrhœa, nausea, and refused everything, even their favorite beverage, whisky.

In the forty-three cases treated at the small-pox ward of this hospital, the infusion of sarracenia was given in nearly every case, and what I have seen of the efficacy of the remedy, of which I have given you a truthful statement, I am convinced that the sarracenia purpurea is a most useful remedy in the treatment of variola.—*Medical and Surgical Reporter.*

2. *Appearance Exhibited by Blood-Corpuscles under the Influence of a Solution of Magenta.*—In a paper to the Royal Society, Dr. William Roberts communicates an account of the following phenomena: When human blood and a solution of nitrate of roseaniline (magenta) are mixed under the slide of the microscope the following changes are observed: The blood discs speedily lose their opacity; they become transparent, and assume a faint rose-color. They also expand sensibly and lose their biconcave color. A dark red spot is observed on some portion of each periphery, whilst their nuclei are displayed with great clearness, dyed a magnificent carbuncle red. Blood from the horse, pig, ox, sheep, deer, camel, cat, rabbit, and kangaroo, gave similar results as regards the red corpuscles. The nucleated blood discs of the oviparous classes also yielded like results, whilst the macula, or spot upon the periphery (although sometimes difficult to find, it having suffered eclipse from the nucleus), was even more decidedly developed than upon the mammalian blood discs. The maculæ were detected in the fowl, frog, dace, and minnow. The author goes on to state that this macula is in each case clearly situated in the cell-wall, and not in the interior of the corpuscle. The main deduction to be drawn from the above experiments (and also the following ones made with a solution of tannin) seems to be that the cell-walls of the blood discs do not possess the simplicity of structure usually attributed to them. Blood-corpuscles floating in their own serum, or after treatment with acetic acid and water, appear to be furnished with perfectly plain envelopes of a simple homogeneous membrane. We think with the

author that his experiments decide this question in a very satisfactory manner.—*Med. and Sur. Reporter.*

3. *The Action of Tannin upon Blood-Corpuscles.*—The remaining half of Dr. Roberts' paper is devoted to experiments performed with tannin. It seems that when blood is treated under the microscope with a solution of tannin (three grains to the ounce), the corpuscles throw out highly refractive buds or projections upon their surfaces. These projections are usually about one-fourth the size of the corpuscle on which they are fixed, but they vary considerably ; very rarely in mammalian blood two projections were seen, and as rarely a corpuscle devoid of any.—*Ibid.*

OBSTETRICAL.

4. *On the Induction of Premature Labor in Certain Cases.*— Dr. Lee related the case of a lady, whom he saw in consultation with Mr. Bowman and Mr. Fergusson, suffering from disease of the retina and albuminuria. From having previously seen a case in St. George's Hospital, in which albuminaria and dropsy, occurring in a pregnant female, had disappeared on the spontaneous expulsion of a dead fœtus, Dr. Lee advised the induction of premature labor. This was not at once carried out, but after some delay some convulsion occurred, and it was then determined not to wait any longer. At this time there was amaurosis, albuminuria, and œdema of the face. The membranes having been punctured, labor ensued, and a dead fœtus was expelled. After this the albumen gradually diminished, and the vision improved. In a postscript Dr. Lee reported the particulars of an analogous case, for which he was indebted to Mr. Bowman.—*London Lancet.*

5. *On Impregnation.*—It is a well-known fact that queen bees lay female eggs first, and male eggs afterwards. Also, that if her conception be protracted beyond a lunar month from her birth, she will produce males only.

In the human female, conception in the first half of the time between menstrual periods produces female offspring, and male in the latter.

Numerous instances of females being "out" in reckoning the time of their parturition gave rise in my mind to a suspicion of the existence of some "law" as a cause ; and from the frequency of a male child coming, I usually concluded and predicted that a late case was due to "an idle boy," and rarely failed in being right. The law above stated explains those irregularities ; and its existence has been confirmed by a friend on whose testimony as to its being a fact implicit reliance may be placed.

That law of generation applies also to animals, and probably to all animated beings.

Whether regarded as applicable to produce a male or a female population, an heir or an heiress to a title or an estate, or successor to a throne,—or to the incalculable advantages of breeding male or female stock, and ultimately rendering the whole feminine creation subservient to the necessities and will of man, it must tend to raise our admiration of the Creator's power of regulating our existence by laws even more mysterious than those yet known to us.

Evidence of the universal existence of such a law, and of its applicability to the purposes of man in "affording a check to an overpopulating of the globe," counterbalancing the effects of war and emigration by raising a male population, in proportion to the demand, instead of females, and in breeding male instead of female flesh for the service and sustenance of our race, may be naturally expected in time, as its bearing among animated nature becomes understood and developed.

Hoping that this communication may serve to increase our physiological knowledge of uterine functions, I beg your permission to have it inserted in your scientific and valuable journal.—F. J. W. Packman, M.D., in *London Lancet.*

6. *Ovariotomy in France.*—M. Huguier lately operated in Paris upon an English girl, aged twenty, whose abdominal development was equal to that observed at the term of gestation. She was operated upon at Bellevue, in the immediate neighborhood of Paris, in a house hired by the hospital authorities especially for the purpose of giving operations of this kind every chance of success. Before reaching the ovarian cyst the operator came upon a nodulated mass, which the gentlemen surrounding him at first took for intestine. It was, however, a cyst developed in the omentum, and which lay between the ovarian cyst and the abdominal walls. M. Huguier considers that no complication of this kind was ever recorded. The ovarian tumor being reached, was found to consist of some hundreds of compartments, some of which were filled with a thick ropy fluid, others with a clear and transparent liquid. The pedicle was seized and tied with silver wire, and cut off clean. The omentum, which contained about a dozen little cysts, was tied in the same manner and cut off. The operation lasted nearly an hour, and the patient died forty-eight hours afterwards of peritonitis.—*Ibid.*

7. *Maternal Impressions.*— Mrs. N——, aged twenty-four years, primipara, a woman of delicate build, and highly nervous temperament, suffered a good deal during her pregnancy with morning sickness, faintings, and great despondency of spirits. About ten weeks previous to her delivery she had a few scattered spots of "herpes" on the front of the chest, which disappeared under ordinary treatment, when some kind, good-natured, knowing old woman informed her it was the "small-pox, and that without doubt her child would suffer from the same disease." The bare notion of this preyed very much upon her mind, and her husband and myself both failed in driving the absorbing notion from her brain.

On June 25d she sent for me, having been in labor some four hours. On rupturing the membranes, a most unusual quantity of amniotic fluid escaped, coming away in gushes with the commencement of each pain. On the child being born, I noticed it had been dead for several days, the head, face, and whole surface of the body being covered at about three-quarter inch intervals with pustules, exactly resembling in size, form and appearance the small-pox vesicles at maturity. The depression in the centre was plainly marked. When the topmost cuticle was detached, there was no fluid of any sort underneath. The mother's first remark was, "Is the child marked?" She fully believed it would be so. We well know how mysterious are the freaks of nature in cases of this description. Still I think a careful compilation of numerous cases would tend eventually to throw more light on the matter.

The following cases have occurred in my practice:

1. A child born with one eye of a light-blue color (right eye); the other a dark hazel. Mother says she had seen a child with similar eyes sitting on a doorstep in Lisson grove.

2. Child born with mouth and upper and lower extremities resembling those of a dog. Mother states that she was worried and torn by a dog whilst she was in the seventh month of gestation.

3. Child born with left eye blackened as from a blow. The mother stated that her husband came home irritated, and struck her (eight hours previous to her confinement) on the corresponding part of her face.

4. A child born with four little fins or stumps for upper and lower extremities. The mother had been frightened by seeing a man maimed in his lower extremities, who used to traverse the streets on a board with wheels.

5. Child born ten nights after display of fireworks in commemoration of Crimean war. Child's feet were covered with bladders of serum, similar to those arising from scald or burn. The mother was alarmed by the descent of a stick of a discharged fire-rocket, which struck the roof close by the place where she was standing.—John S. Beale, M.R.C.S.L., in *London Lancet.*

Obitual Record.

Died, in Hagerstown, Wayne Co., Indiana, on the morning of the 25th of August, 1863, of camp diarrhœa, Calvin West, M.D., aged 57 years.

He died at peace with himself, with the world, and with his God.

In the latter part of May last, at the solicitation of Gov. Morton and the sanitary authorities of the State of Indiana, Dr. West, with others, went down the Mississippi river to render special volunteer surgical aid to the needy of Gen. Grant's army, who were wounded in the sanguinary battles that immediately preceded the regular investment of Vicksburg. He remained with the army in the vicinity of Vicksburg in active service until the first of August, when he was seized with a violent but painless diarrhœa, and in a few days left for home.

After much suffering from the inconveniences of traveling, he arrived at home on the 12th of August in a very debilitated condition. A few days of home management made such a favorable change in his disease and condition as led to the liveliest hope of an early restoration to health. But a relapse set in on the 22d of August, increasing on the 23d, and although the diarrhœa was then checked, he was so far exhausted that he continued to sink, and quietly expired at 1.30 o'clock A. M. on the 25th, twenty-five days after the beginning of the attack. With a clear intellect he was entirely conscious until within a few minutes of his demise, and comprehending fully his situation, made every disposition for his approaching transit to eternity.

Thus did the patriotic volunteer fall a victim to the destroying angel while responding to an appeal to his professional philanthropy made by the rulers of the State. And lately the special volunteer service has been particularly fatal to Indiana surgeons. Dr. Bullard, of Indianapolis, Dr. Elliott, of Thorntown, and Dr. West, of Hagerstown, all members of this same expedition, have died of disease contracted while on their mission of mercy.

Dr. West was the youngest son of an extensive and thrifty farmer in Oneida County, New York. Having little inclination for farm duties, and early manifesting a great devotion to books, he was given a liberal education. He studied medicine with Drs. G. W. and H. H. Pope in Rome, New York, and graduated at Fairfield in 1831. The same year he left for the West, and after several changes of location, finally settled, about eighteen years ago, in Hagerstown, where he continued until his death. In 1852–3 he attended lectures and took the *ad eundem* degree in Jefferson Medical College, Philadelphia. In 1834, he married the youngest daughter of Dr. Jacob Wolf, who survives him without children.

Dr. West was intensely devoted to his profession in its highest and scientific aspect. He was a constant attendant at County, State and National Medical Society meetings, and always an active and working member; was diligent in the observation of the phenomena of disease in the living, and of pathological changes in the dead. He had a high sense of order and was methodical in all his affairs, in some things to a fault. He was a liberal supporter of whatever tended to elevate the professional standard or promote the professional welfare. He was the greatest patron of medical journals, had the largest library, the most extensive anatomical and pathological museum, and the most complete assortment of surgical instruments and other appliances in mechanical medicine of any practitioner in his own part of Indiana, and I presume his possessions were, in these particulars, more ample than those of any one in the State. H.

DIED, in Covington, Ky., on Saturday, Sept. 19th, at 8 o'clock P. M., Dr. WM. D. HOLT, aged 54 years.

Dr. Holt was well known as a prominent physician and active citizen of our neighbor city Covington. His health has been steadily failing for some time so as to forbid his engaging in the active duties of his profession. His death is lamented by a large circle of sincere personal friends.

DIED, in Atwater, Portage Co., Ohio, on the 23d of August, of malignant dysentery of but a few days' duration, the wife of Dr. E. WARRINGTON.

Mrs. Warrington had for several years been failing from pulmonary tuberculosis, and her already exhausted strength soon yielded to life's formidable foe, and left the Doctor to mourn his irreparable loss.

This epidemic made its appearance about three weeks ago at Atwater Station on the P. & C. R. R., the first case proving fatal; and from what I could learn, while in the parts, to see a few cases in consultation, more than one-half the subsequent cases died; some in a short time after the attack, others lingering several days, the patients presenting the typhoid characteristics. It was thought chlorate of potassa exercised a beneficial influence over the disease. Depressing remedies could not be safely continued, though the febrile reaction might be quite marked.

In our own vicinity a rather milder form of the disease has made its appearance within a few days. J. T. C.

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ART. I.

Trachoma.

[A Paper read before the Cincinnati Academy of Medicine.]

BY E. WILLIAMS, M.D., CINCINNATI.

The disease upon which I promised to make some observations to-night has been designated by a variety of names, as "Egyptian ophthalmia," "granular conjunctivitis," "granular lids," "military ophthalmia," "trachoma," etc. I prefer the last name, *trachoma*, because it indicates the one striking characteristic — the granulations or irregularities of the conjunctival mucous membrane, without involving any theory as to their origin, nature, or manner of propagation. The name is of Greek derivation, and means simply *roughness*.

As to the origin of trachoma, there is every reason to believe that it has existed from time immemorial. In the writings of Hippocrates there is a description of it, with the method of cure. The affection has prevailed more or less extensively in all times and among all nations; but it seems never to have been well understood or minutely described by writers until after it was spread over Europe by the return of the French and English soldiers from their campaign in Egypt. The first clear accounts of trachoma date from the early part of the present century.

Causes.—Numerous and very conflicting opinions have been advocated as to the cause of granulations. Some consider it a specific disease, endemic in Egypt, and produced alone by actual contact of the purulent or muco-purulent discharge. Others look upon it as a catarrhal or muco-purulent inflammation of the conjunctiva, originating not only from contact of the purulent secretion, but arising spontaneously, as it were, from exposure to cold and dampness, especially after being heated, from atmospheric vicissitudes, and from various noxious substances in the atmosphere that act as local irritants upon the conjunctiva. Most authors now look upon simple, catarrhal and purulent conjunctivitis as but different degrees of essentially the same morbid process. I have seen cases of simple, mild inflammation of the conjunctiva, not arising, as far as could be ascertained, from any contagion, excited to the most violent purulent form by certain aggravating circumstances, and proving a source of inoculation to numerous other persons with whom the patient was associated. On the other hand, I have observed slight attacks of simple conjunctivitis produced by inoculation with the virus of gonorrhœa or purulent conjunctivitis, and which could not be diagnosed from simple catarrh by any peculiarity except its known origin. Indeed, in many instances of the spread of trachoma through a family, a regiment of soldiers, or the inmates of a school or of an asylum, we see some cases of the most mild and transient character, attended by nothing but a very slight excess of mucous secretion, and subsiding spontaneously in a few days; while others will assume the most destructive purulent form, and that, too, when they have both been inoculated from the same patient. These facts, which have been seen again and again, establish, as I think, two points: First, that catarrhal and purulent conjunctivitis are but different forms of the same disease; secondly, that this morbid process, conjunctivitis, may arise either from contagion or from atmospherical and other causes. It is, however, an undoubted fact that conjunctivitis induced by contagion is more violent and dangerous to the integrity of the eye, than when it originates from other influences.

Mode of Propagation.—I have taken for granted that trachoma or granulations are a product of inflammation, whether that inflammation recognize contagion or some other influence as its exciting cause. Admitting that the disease spreads by being communicated from one person to another, by some agency,— and that is not denied now by any respectable observer or writer,— the question arises, How is it propagated?

It is conceded on all hands that trachoma may be communicated by contagion—*i. e.*, by actual transference of the secretion, either by accident or designedly, from a diseased to a healthy eye. But can it also be conveyed by infection—that is, indirectly through the medium of the atmosphere? This is still an unsettled point. For my own part I am a strict contagionist, and do not believe the disease can spread by any effluvia arising from sore eyes, and conveyed through the atmosphere. The only circumstances under which there is any ground for believing in this mode of propagation, are those of large numbers of persons being crowded together in dirty and badly ventilated apartments. But these same influences favor the spread of the disease by contact through the agency of towels, sponges, bed-clothes, wash-basins, etc: Even where it can not be ascertained that the new cases arising have been produced by inoculation, still the well known carelessness of many persons under such conditions justifies the belief that it may have happened. Besides, it is to my mind unreasonable to suppose that the secretion from so small an extent of surface as the conjunctiva, even when a number of patients are crowded together, should so charge the surrounding air with exhalations as to give rise to other cases in that way. This remark will acquire additional force when we reflect that the pus from an inflamed conjunctiva, when kept for two or three days, especially if it has been exposed to the air, loses its contagious properties altogether. In my own practice I have again and again treated cases of purulent conjunctivitis where only one eye was affected, and in every one where I could avoid the actual conveyance of the matter to the other eye, it has escaped.

It seems to me that the exhalations arising from one eye in such close proximity to the other, if they were infectious as alleged, would inevitably communicate the disease to it. In the discussion of this question at the meeting of the *International Ophthalmological Congress* at Brussels in 1857, the strongest cases in favor of infection were related by Monsieur F. Hairion, of Louvain. I translate his observations as follows : " Between the 15th and 21st of March, 1842, five hundred and eighty soldiers were admitted successively, in different detachments, at the depot of the regiment d'elite. On their arrival, all these men were rigidly examined by myself. Those among them who presented the conjunctiva covered with granulations, or only in a suspicious condition, were immediately removed, and sent, the latter to the hospital, the former to the ward for the granulated. Those who were found healthy were lodged in the barrack called des Dames Blanches, and which had been abandoned a few days before by a battalion in which granular ophthalmia had ceased to exist for eighteen months. Beds and bedding were given to them, which had been used two years previously by the Third Regiment de ligne, which contained at that time a large number of granulated. The 27th of March, five days after the arrival of the last detachment, I examined these recruits again, *and assured* myself that they all had the conjunctiva *perfectly healthy*. On the 2d of April, at my second visit, I found two men with vesicular granulations at the external canthus of the conjunctiva palpebralis inferioris. On the 9th of the same month, five new cases like the preceding presented themselves. On the 16th three, and on the 22d six. All these men were separated from the others; but, wishing to follow the march and the development of the granulations, I did not subject them to any treatment. The 29th, the day before their departure for the regiment, I made them a last visit, and found four new cases; in all, twenty.

"In 1843, the regiment received six hundred recruits, who were lodged in a vast building which had been occupied, three years previously, by the third regiment of line, which contained many cases of granulations. Those found affected with granulations at the time of their arrival were immediately placed in a remote part of the building, to be there treated.

"Wards Nos. 1 and 6 situated on the ground floor, as well as all the articles of bedding contained in them, were submitted for twenty-four hours to the action of disinfecting fumigations.

"Twice a week, the soldiers were examined with the most scrupulous care, and at their departure from Louvain we discovered thirteen cases of granulations, exclusively among the men who occupied the room where the fumigations had not been practiced. The two hundred and sixty who had slept in the wards Nos. 1 and 6 were completely exempt.

"Finally, in 1844, six hundred new recruits arrived, and were lodged in the same barracks and were supplied with the same articles of bedding; but this year, these objects and all the rooms used for lodging them in, were subjected for forty-eight hours to fumigations of chlorine. This time the success was complete, and not a case of granulations occurred."

(To be continued.)

ARTICLE II.

Hæmorrhagic Diathesis.

BY D. S. GANS, M.D., CINCINNATI.

The following case observed in St. John's Hospital suggested to me the propriety of laying before your readers a synopsis of what has been said of a disorder which is so rare that not many have seen cases of it, and so extremely obscure in its nature as to exhibit a very meagre literature.

Miss F. H., aged twenty-five years, above medium height, fair complexion, brown hair and eyes. Remarkable fortitude of mind, as exhibited during her stay at the hospital. She stated that whenever an abrasion of her surface occurred from any cause, it would bleed for about a week. None of her relatives that she knew ever had such difficulty. She presented herself to Dr. Blackman on account of a tumor in the submaxillary region of the left side, which she wished to be removed by an operation. Dr. Blackman understanding that she was of an hæmorrhagic diathesis refused to operate, but she and her friends insisting upon it, he removed the tumor on Tuesday, June 15, at 3 o'clock P. M., in presence of the class. He made an incision three inches in length, his assistant (Dr. Foster) following each stroke of the knife with a sponge, saturated with the strongest solution of persulphate of iron. Operation without chloroform and performed in a few moments. Sponges saturated in the solution of persulphate of iron were inserted, and for a while changed frequently, then one was inserted and the wound closed over it by means of the twisted suture. Pressure was applied over this, members of the class volunteering to keep up pressure by hand.

June 17, 9 A. M.—Some bleeding, not rapidly, but seemed to be—as it has done for 16 hours—oozing away. Blood florid, and seems very thin and will not coagulate. She is unable to swallow solid food, owing to the pressure on the throat. Pressure continued by means of compress and bandage. Drank some milk and took a little wine.

6 P. M.—Condition same as in morning, oozing very little, sponge removed, and lint saturated with persulphate of iron inserted, and pressure continued by means of compress and bandage. She took internally, tinct. chloride of iron, ʒ½ every four hours, and used a wash of bromine, and fumigated with the same, as prophylactic for erysipelas. Diet, milk and broths *ad libitum*, with wine.

June 19, 6 P. M.—Treatment has been continued. Wound dressed two or three times each day. New lint, saturated with a strong solution of persulphate of iron, inserted each time, and pressure kept up. The bleeding has gradually diminished, and has now entirely stopped. Wound beginning to suppurate. Lint and pressure removed, and wound kept clean.

June 20, 6 A. M.—Doing well, no bleeding, suppurating well. Patient can sit up in bed, and beginning to take solid food. Iron and bromine have been continued all the time. Every possible care has been taken to prevent loss of blood. Can not say how much has been lost, but *judge that* up to this time she has not lost more than twenty ounces, independent of amount lost at time of operating, which, owing to extra care, was not severe. At present the pulse is good, and strength improving. At no time has she seemed to suffer from physical weakness.

June 21, 6½ A. M.—The resident physician was summoned hastily. Patient had been for some time sitting up in bed, feeling quite well, conversing, and was about to take breakfast, when the wound began to bleed, apparently without cause. He was at her bedside in less than a minute after bleeding commenced. Blood was fluid and thin like water, and seemed coming from the whole surface of the wound, like water from a sponge. There was no jet as if from an artery. The flow was so rapid, that when wiped away there was no intermission. Before remedies could be applied, she fainted. Was placed in a horizontal position, and an attendant was directed to apply restoratives. A pledget of lint, saturated with the solution of iron, was inserted, which failed to check the bleeding. It was removed and another inserted, saturated with a stronger solution, and pressure applied firmly and evenly. This checked the bleeding readily, and the patient soon revived. The time from the beginning of bleeding, until the alarming symptoms were checked, could not exceed two minutes, yet such was the rapidity, that about ten ounces were lost. Dr. Blackman (who had been summoned) soon arrived, and applied a compress and bandage. Diet again restricted to fluids, and wine freely administered. Also muriatic tincture of iron, half a drachm every four hours.

6 P. M.—Blood has been oozing all day. New lint, saturated with iron, new compress and bandage were applied at noon, which have now become saturated, as well as saturating a number of cloths. Same treatment continued.

June 22, 6 P. M.—Bleeding has been gradually growing less since last evening, and since noon to-day has been almost none at all. Lint and bandages now removed, and fresh lint applied, without being wet with iron. Beginning to take solid food again.

June 25.—Has been steadily improving. Wound suppurating nicely, and beginning to heal. Diet good. Wound kept clean.

June 30.—Wound almost closed. Dressed with adhesive straps and soft cloth over them. Yesterday she took a drive to Spring Grove. To-day (1 P. M.) she walked one square and took the cars for home.

1.—FREQUENCY AND GEOGRAPHICAL EXTENSION OF THE HÆMOPHILY.

The history of this disorder can hardly be traced beyond the middle of the last century. The Arabian physician Alsaharavi mentions in his writings, in the Twelfth Century, a disorder identical with hæmorrhagic diathesis, and hardly any cases were regularly reported until 1720, by Dr. Otto, of this country. Cases have been reported since, in Europe, America and Java, and it is plain that this disorder is on the increase, as seen by the fact that in 1820 there were known only 11,—in 1839, 46,—in 1849, 100,—in 1854, 152 hæmophilic families, with 452 individual cases, which have increased up to the present time to 174, with 612 individuals.

The following table will show more clearly the geographical extension of hæmophily (I retain this appellation):

Country.	Families.	Individuals.	Males.	Females.
Germany	75	238	218	20
Switzerland	9	45	45	
Holland	2	9	7	2
France	17	43	42	1
Great Britain	36	88	80	8
Sweden and Denmark	6	13	8	5
Russia and Poland	8	14	11	3
North America	21	58	55	3*
Java	1	5	5	
Total	175	513	471	42

* This includes the above reported case.

The most of the cases which have come to our knowledge occurred in Germany; then follow in descending frequency, Great Britain, North America, Switzerland, France, etc. Hence Germany bears 48 per cent., Great Britain, 18 per cent., Switzerland and America, 9 per cent., France, 8½ per cent. of all reported cases.

The opinion is held that hæmophily happens principally amongst the Germanic and Anglo-Germanic nations, and more seldom in countries inhabited by Slavonic and Romanic nations. The most extreme northern limits of this affection now known is the 61° northern latitude, at Christiana; the most southerly happened at Palembang in the East India.

2.—PHENOMENA OF HÆMOPHILY.

Spontaneous Hæmorrhages.—It can not be proved by numbers that these happen in general earlier than the traumatic ones; but it has been frequently observed that the first present themselves only when traumatic hæmorrhages have preceded. Amongst the prodromi of spontaneous hæmorrhages the case reported by Huss deserves mention, in which the individual suffered an intercostal neuralgia before the entrance of spontaneous hæmorrhage. In reference to the frequency of the various spontaneous hæmorrhages, the latest observations show the following relation: Of 256 cases there were — epistaxis, 122, cœcal hæmorrhage, 34, hæmatemesis, 11, intestinal hæmorrhage, 33, hæmorrhage from the urethra, 13, hæmoptysis, 15, hæmorrhages from the points of the fingers, 4, from a tumefied place of the scalp, 4, from the tongue, 3, from the carunculæ lachrymalis, 3, from the ear, 3, from the eyelid, 1, from the female genital organs, 10 times.

Traumatic Hæmorrhages.—It has variously been observed that individuals with this affection have been more sensitive and more disposed to renewed hæmorrhages after the first traumatic hæmorrhage, so that we are tempted to date the disorder from the first hæmorrhage. Venesection, although the hæmorrhage after it is difficult to arrest, is proportionally less harmful than other bloody operations. The same is the case with cupping. More dangerous seem to be the application of leeches and the extraction of teeth, by which a number have died in consequence of the hæmorrhage which followed. Even after the simple operation of vaccination dangerous and even fatal cases of hæmorrhage have been observed. The healing of wounds happens very seldom by first intention; new hæmorrhages frequently take place during the suppuration, which often is of a bad character. The hæmorrhage is generally capillary, coming from the smallest arterial ramification; the blood oozes from the wound as out of a sponge which is compressed, without jutting,—or it oozes through the skin, collecting there in drops; very rarely it runs in a stream.

The *duration* of the bleeding and the amount of blood are very various; in some cases the hæmorrhages lasted for four weeks. The above reported case shows the peculiarity that she bled each time for seven or eight days.

Petechiæ, Ecchymosis and Hæmatoms.—These have to be looked upon as spontaneous or traumatic interstitial hæmorrhages; and belong, next to the umbilical hæmorrhages, to the earliest visible phenomena of the hæmorrhagic diathesis, presenting themselves, particularly ecchymosis and petechiæ, in most of the observed cases, already in the first year of life. They are very seldom entirely absent, and sometimes they are the only phenomena of hæmophily. If they are spontaneous, a congestive condition or orgasm, associated with pain in the limbs and joints, precedes them. They make their appearance mostly on the exterior, seldom on the inner organs. Generally, more frequently on parts distant from the heart—as the legs, scrotum, scalp

—the face being almost always excepted. They are irregular in shape, of various sizes, from that of the usual petechiæ to that of the hand, dark blue or blue red, becoming afterwards dirty yellow and green; disappear slowly, are painless, and do not bleed easily without external cause. The hæmatoms are mostly of traumatic origin, dark black or blue, with a red edge, of the size sometimes of a child's head; sensible to the touch, sometimes very hard, at other times soft and fluctuating; they disappear generally of themselves, and very serious hæmorrhages take place after opening them. Only a slight pressure on some part of the body is generally sufficient to produce them.

Pseudo-Rheumatism and Articular Tumefaction present themselves in different degrees of severity, from the simple rheumatic pain to the severest articular tumefaction and rheumathritis. They are generally preceded by congestive symptoms; sometimes they are followed by spontaneous hæmorrhages; appear sometimes cotemporaneous with these, or cease on the appearance of them. They occur most frequently in the fall and spring of the year, in wet weather; the pain is nearly intermittent, increasing at night, and interfering with the function of the affected limb. Usually, but not always, tumefaction of the various joints is combined with it, which ought not to be mistaken for the hæmorrhagic tumors. Sometimes one joint suffers, at other times a transposition to another joint takes place, till the affection locates itself in the knee-joint. Relapses are frequent. They appear generally spontaneously, are colorless, seldom accompanied by ecchymosis, sometimes hard as cartilage, but mostly elastic, soft, usually painless, at night the seat of intermittent tearing pain. They are originally not inflammatory, but may become so by external causes, and leave then not unfrequently contractions, paralysis and atrophy.

Although these phenomena have in manifold respects a great resemblance to arthritic and rheumatic affections, still it would certainly be erroneous to consider the pain and the articular tumefactions of the individuals in question in all cases of a rheumatic nature. For partly were those phenomena observed in many cases from the earliest youth, without other rheumatic symptoms intervening before, afterwards, or at the same time. Partly do the casual connection, and the oft observed alternate relation with ecchymosis and hæmorrhages, point to another specific cause, which constitutes just a peculiarity of the hæmophily, and they are therefore designated by the writers on hæmophily as "pseudo-rheumatic."

Besides these generally not wanting phenomena, other pathological affections are less frequently observed; as organic affections of the heart, variations in the construction and course of the umbilical vessels, congenital phymosis. Acute diseases are not more dangerous than in other persons, and an immunity from exanthematous disease of childhood has been often observed. Chronic rheumatism and scrofula form complications; more seldom rachitis and chronic eruptions. Hæmorrhoids are in earlier years very rare, whilst they appear more frequently in later years under diminution of the hæmorrhagic diathesis. Scurvy is also mentioned as complication. Phthisis is comparatively very seldom. Wet and dampness and the inner and outer use of mercury seem to form an idiosyncrasy of these bleeders.

Course and Result of the Hæmophily.

Not all persons with this diathesis die by loss of blood. A gradual extinction and a passing over into other diseases may take place, and has really been observed. It has been observed that the diathesis became extinct after the appearance of white swelling, articular tumefaction or contractions of limbs.

The most frequent result is death, however, through inner or outer hæmorrhage or anæmia. Of 152 male individuals there died —

Up to the first year	20	Between 21 and 28 years	7
Between 1 and 7 years	61	Between 28 and 35 years	5
Between 7 and 14 years	36	Between 35 and 45 years	3
Between 14 and 21 years	16	Above 50 years	4—152

Of 13 female subjects—

Up to the first year	7	In the nineteeth year	1
In the second year	3	In the twentieth year	2—13

Condition of the Blood.

Although we possess chemical and microscopical analysis of the blood, they have not been made with the necessary care; particularly it has in the most cases not been stated how long after the beginning of a hæmorrhage the analysis was made, for it is reasonable to suppose that the composition of the blood must be different at the beginning of a hæmorrhage from that of longer duration. Still it has been sufficiently shown that the blood primitively is not deficient in fibrin, that it coagulates yet at the beginning, and that only at a later period decrease of the solid ingredients and hydræmia takes place,—a fact very important for the pathology and therapy of this affection. Neither does a primitive deficiency of blood corpuscles, oligocithemia, exist, at least not before hæmorrhages have taken place, or at the beginning of the same. Dr. Finger found, on the contrary, by repeated examinations on the fourth and sixth day after bleeding had commenced, a total absence of white corpuscles, but unmistakably relative increase of the red ones, and only after a long continuance of the hæmorrhage a decrease of the same. Others have made the same observation. We know little or nothing about the contents of water of the blood, only Heyfelder asserts that the quantity of water is below the physiological standard. His analysis gives 780 water, 5 fibrin, 70 albumen, 137 red constituents; whilst healthy blood, according to Lecanu, shows 789·320 water, 2·945 fibrin, 68·059 albumen, 132·490 red constituents. Blood in inflammation, according to Becquerel and Rodier, 791·800 water, 5·8 fibrin, 66 albumen and 128 red constituents. Rokitansky considered, but without any further proofs, the blood of hæmophilic persons as primary hydræmic. We have to conclude, however, as the result of examinations of the blood, that in this diathesis an abnormal composition of the blood does happen, but that this does not consist in primitive diminution of the solid constituents, but, on the contrary, that at the beginning of the loss of blood the fibrin is not diminished, the quantity of the red corpuscles rather increased, and that only after continued bleeding a diminution of the solid constituents and hydræmic condition takes place.

POST-MORTEM EXAMINATIONS.

These have been made in too small a number to have led to any definite results, nor were they made, generally speaking, with sufficient accuracy as to be uniform. As hæmophilic persons generally die in consequence of hæmorrhages, the signs of anæmia are usually found. Other abnormal conditions,—for instance, hypertrophy of the heart, dilatation, opening of the foramen ovale,—have to be looked upon rather as complications than cause of the hæmophily. An abnormal thinness of the walls of the arteries was observed by most all, and is, consequently, the only important anatomico-pathological result of these examinations. The first accurately made post-mortem examination was the one made by Virchow in 1857, on a man twenty-four years old, who belonged to a hæmophilic family and who died of an enormous hæmatom of the right thigh. Being, therefore, of great importance, I will give the result in a brief manner.

"The hæmatom, reaching from the right inguinal region down to the lower third of the upper leg, hard to the touch, and fluctuating very indistinctly, showed, after being cut, nowhere a cavity filled with fluid. The epidermis was gangrenous on the highest point of the tumor, and of the extension of a hand; the deeper layers showed harder and softer places. The first contained coagulated blood, the latter disintegrated cellular tissue infiltrated with blood. It reached nowhere to the bone, but adhered firmly to the sheath of the crural artery, and terminated below in a firm porky substance. The blood-vessels could not be distinguished in the inner part of the tumor, but no injury could be discovered on the veins or arteries. An oblong tumor indistinctly fluctuating was situated in the right inguinal region; it showed out into a cyst three centimetres thick, almost cartilaginous, containing dry, brown, easily broken up, occasionally gum-like substance, without any plain organic structure. The abdominal cavity contained very little serum; the viscera in the same did not exhibit any notable change or lesion, only the spleen was somewhat enlarged. Lungs, liver, kidneys healthy; heart pale, at the base and right ventricle rich in fat. The aorta at its origin containing spots variously raised and fatty degenerated; in its whole course narrow, thin, and so to say, of infantile appearance, otherwise very elastic. Its inner coat showed, from the arch to its bifurcation, yellow whitish stripes and spots in consequence of fatty degeneration; similar single spots were also visible on the convex parts of its arch.

"A small quantity of coagulated blood in the heart, as well as in the larger vessels, forming particularly in the heart, in the pulmonary artery and aorta, porky, very firm and elastic crusts. The blood was already on the next day so decomposed by putrefaction, that no blood corpuscles could be discovered in it. White granules separated themselves from it, which, microscopically examined, consisted of phosphoric ammoniac-magnesia. The chemical analysis showed a great quantity of lucine.

"The microscopic examination developed slight fatty degeneration of the heart, and the inner coat of the arteries very tender on many places, but no alterations of the smaller arteries and capillaries. There was nothing abnormal about the nerves."

PREDISPOSING POINTS.

According to the latest statistics, there are eleven male to one female bleeder. The affection is frequently, but imperfectly and partially developed in the female; still there happens also very distinct and marked cases, and sixteen cases of fatal hæmorrhage are known to have occurred in hæmophilic females, one of which, a girl, aged 20, blooming and healthy, but of a hæmophilic family, died in consequence of the rupture of the hymen and following hæmorrhage the first night after her wedding. In reference to age, it has been shown that the disorder may present itself soon after birth, but the formerly held opinion that the so-called spontaneous umbilical hæmorrhages which occasionally accompany the process of the falling off of the umbilical cord had to be looked upon as the first symptom of the hæmophily, has to be very much restricted ; the newest observations having shown the fact that out of two hundred and two cases of such hæmorrhages fourteen were met only in hæmophily. This is so much more remarkable, considering the great tendency to other traumatic hæmorrhages in hæmophilic children of that age, as is seen by the danger of the circumcision by hæmorrhage. The period of the first dentition must be considered as the age most favorable for the development of the hæmophily, the affection making its first appearance (forty-eight times out of seventy cases) at the end of the first year of life. The latest period known in which it appeared first was the twenty-second year. There does not exist, according to the newest experience, a particular habitus of the hæmophilic persons, although the most of them possess a delicate, white skin, with markedly developed veins, light hair, blue eyes, whilst black hair and dark eyes are met with occasionally. Slight tumefaction of the spleen was observed in a few cases. The excretions and secretions neither offer anything peculiar ; two analyses of the urine until now reported, showed certainly a diminution of urea, but in such different degrees and with such differences respecting the other constituents of the same, as not to furnish ground for any conclusion upon a positive alteration of the metamorphosis of tissue.

We know but little about the influence of habitations, trade or occupation upon hæmophily. It seems that it occurs equally in cities and in the country, not sparing either rich or poor. Neither has the kind of food any influence. In reference to the religious denominations, it is worth while to mention that this affection occurred proportionally frequent amongst Jews, and has also been observed amongst Mahomedans, both prescribing circumcision, which caused in eleven cases seven fatal and four very dangerous hæmorrhages.

It may be here noticed that most hæmophilic families show an unusual productiveness, to compensate, so to say, the great mortality prevailing amongst them. A calculation shows that 21 families had together 204 children, giving to each family 9⅐ children, whilst usually 4 and 5 children are counted to one family.

FIRST ORIGIN AND TRANSMISSION.

There is a wide field yet for investigation. The affection is mostly of hereditary, *seldom congenital* origin, more seldom acquired. But *it is erroneous to ascribe* to it always a hereditary origin. Besides seeing the hæmophily yearly presenting itself *de novo* and not in consequence of hereditary transmission, it is certain that it must have commenced with primitive genesis, and it would be irrational to assume, in the present great extension of the disorder, a common relationship between the different families, or to conclude that they came all from the same stock. The hereditary origin will certainly numerically be the most frequent, as original congenital cases become usually reproduced again by hereditary transmission. The most reports about primitive genesis and the peculiar circumstances connected with it are very meagre and imperfect, and it is usually said that the patient came from a hæmophilic family. We possess only of ninety-eight families accounts about the sanitary condition of the parents or predecessors. The hæmophily occurred in forty-six for the first time in the family, hence was of congenital origin; in fifty-two it was hereditary, transmitted from parents, grandparents, or their sisters and brothers. In twenty out of the congenital cases the parents or grandparents were entirely healthy; twenty-six suffered of other diseases, as gout, scrofula, syphilis, pulmonary or cardiac diseases. It seems to be certain that the mother is much more concerned in the primitive genesis than the father, which seems to be proven by the fact that where a father has married twice or more, he had with the one healthy, with the other one, hæmophilic children. If the hæmophily may be acquired without any congenital origin is not known yet. There are yet very few and unreliable observations about it, they showing that mothers quite well and healthy, and together with their husbands not belonging to any hæmophilic family, not only give the disposition to hæmorrhages to their formerly healthy sucking babes by a violent mental affection during lactation, but giving birth after that to hæmophilic children.

The hæmophily once produced is usually transmitted according to certain natural laws through hereditary reproduction to entire generations, with a certainty as we hardly ever meet again in pathological investigations. This law consists essentially in the circumstance that the apparently healthy daughters of hæmophilic families, marrying even quite healthy husbands from other families, transmit usually without bleeding themselves to their children the permanent hæmorrhagic diathesis in such a manner that the boys are bleeders, the daughters not, or very rarely.

The question through how many generations this affection may be transmitted, and if it may become extinct otherwise than by dying out of the family, is very difficult to answer at the present stage of our knowledge. We know only that it can be traced back in some families for four and five generations. The oldest information about the two American families, Appleton-Brown and Smith-Shepard, date from 1720 and go to 1806. The two great hæmophilic families of Tenna in Switzerland exist, as far as it is known, from 1770, whilst their descendents die yet of hæmorrhages at the present time.

THEORIES OF THE HÆMOPHILY.

There could, of course, not be wanting theories to explain the nature of this most remarkable affection ; but the many theories brought forward are not always based upon facts, and are but too frequently the result of theoretical speculation. The prevailing theories may be reduced to three different manners of viewing the subject.

1. From a chemico-vital standpoint the affection was to be explained from an original defective composition of the blood, primitive deficiency of the fibrin and blood corpuscles ; and those who advocate this theory point to the chemical-morphological examination of the blood, but of which the first showed at one time increase, at others normal proportions, at others decrease of the solid constituents of the blood, no doubt on account of having made the examination at the different periods of the hæmorrhages ; whilst the morphological examination has not given any uniform or any way certain results.

2. A more anatomical theory is based upon the results of the pathological anatomy. Abnormal condition of the walls of the vessels, particularly unusual thinness and delicate construction of the capillaries, as also atrophy, fatty degeneration and narrowness of the larger arteries having been found in many cases. There is no doubt that the anatomical view of it, leaving vital action not too much out of view, deserves consideration ; but we must not lay too much stress upon the alterations of certain parenchymatous organs, as the heart and spleen found in a very few cases, the connection of which with the hæmorrhagic diathesis is not substantiated yet. On the contrary, they have to be looked upon as accidental complications.

3. A third manner of viewing the subject is of much importance and deserves great attention ; namely, that also vital conditions come into play which neither can be discovered by chemistry nor pathological anatomy, for it is certain that the hæmorrhages of these individuals can not be explained simply by an abnormal composition of the blood, nor by physical alterations of the coats of the vessels. The increased *vis-a-tergo* of the heart, the strong and frequent cardiac contractions and the elasticity of the walls of the vessels, have to be con-

sidered also, which as vital actions depend upon the regulating force of the nervous influence. Late physiological investigations leave hardly a doubt about the possibility of the nervous influence upon the capillaries, so that in deficient innervation the tone of them is lessened, and dilatation of the vessels may be produced.

But none of these theories is able to explain satisfactorily by itself alone the nature of the hæmophily, and the symptoms of this affection can only by explained by a combination of these theories. Considering these different theories in their various bearing, the following *resumé* is the result:

1. The abnormal relations of the composition of the blood, particularly the decrease of the solid ingredients, have generally been observed secondarily, and only primarily in very few, not exact observed cases.

2. There exists in this affection acute and chronic nutritive derangements of the coats of the arteries, which in some cases have been found to be in larger arteries fatty degeneration and atrophy of their walls, in other cases an unusual delicate construction of the capillaries. These alienations of the walls of the capillaries seem to be general and not limited to certain parts, as a spontaneous hæmorrhage breaks out again in another place if arrested at the original one. Together with this there seems to exist also a small force of resistance of other tissue, particularly the cutis and mucous membranes, more seldom of the serous ones.

It is proper to lay particular weight upon the fact that there exists in these persons almost general vascular excitement, increased action of the heart, tendency to orgasm and fluxions, and preceding frequently the hæmorrhages. Congestion of various parts neither seem to be absent, showing themselves by redness, a feeling of pulsation, itching, pricking of the congested part before the bleeding. The cause of this increased cardiac contraction seems to depend upon a relative richness of the blood corpuscles.

4. In the production of hæmorrhages abnormal innervation plays an important part, by which the tonics of the capillaries become diminished, and capillary congestion and stasis be produced, which explains the severity and difficulty of arresting traumatic hæmorrhages, but does not explain satisfactorily the production of spontaneous hæmorrhages, predisposing to be sure to them, but producing the same really by coöperation of other causes. Perhaps such cases in which violent mental emotions have given rise to the production of hæmophily, find such an explanation. This would explain, may be satisfactorily, the production of the various hæmorrhages and other

phenomena, but the question how this permanent hæmorrhagic diathesis takes place primarily is open yet for discussion, particularly if we reflect upon these cases where the affection has been acquired in later years by mental impressions.

DIFFERENTIAL DIAGNOSIS.

Confounding this affection with articular rheumatism is not easily possible; for if even both are very similar in their location and consequences, (particularly in reference to arthralgia, articular tumefaction and contraction,) and if even such diagnostic mistakes lead not seldom to therapeutic errors,—for instance, in the untimely application of cups and leeches,—still the similarity between both is but an external and apparent one, and the course and peculiar genesis of this diathesis will in most cases enable us to make out a correct diagnosis.

More difficult is sometimes the differential diagnosis from some diseases of dissolution, as scurvy and morbus maculosus hæmorrhagicus, between which and hæmophily there exists an intermediate form in which the diagnosis may become difficult. The hæmorrhagic diathesis is not the only common character of all these diseases, but the localization in the skin and joints may also be very similar. In making out the diagnosis it will be necessary to consider that scurvy and morbus maculosus are always acquired, never congenital or hereditary; that both may happen epidemic and endemic; further, that in both the hæmorrhages are neither as serious nor so frequent, and much easier to arrest than in hæmophilic persons; that, finally, the tendency to violent and exhausting hæmorrhages are wanting in them after traumatic causes; besides there exists in scurvy a greater disposition to decomposition of all secretions, to ulcerative processes, affections of the gums and to bloody serous exudations in the serous cavities. Although it is true that in all three affections a hæmorrhagic diathesis exists, the same is in hæmophily a permanent, and in scurvy and morbus maculosus a transitory one.

PROGNOSIS.

In reference to the prognosis of the hereditary transmission,—that is to say, the greater or smaller probability of the same,—the following conclusions as the result of observations may be laid down:

1. If one parent possesses the hæmorrhagic diathesis, *i. e.*, bleeds himself, and the other healthy, experience shows that the hereditary transmission to the descendants becomes much more probable if the mother is affected by it than if the father were affected.

2. From a marriage of a man who belongs to a hæmophilic family, but not bleeding himself, there is nothing to fear ; but, on the contrary, if it is a woman, the prognosis is much more unfavorable, and it is to be presumed that the descendants of these will be afflicted with it. For all observers agree that women from hæmophilic families, even if they appear healthy, and do not bleed, and marrying healthy men, transmit the diathesis.

3. Much more unfavorable is it if both parents belong to hæmophilic families, or bleed themselves. Hence the transmission to their offspring is more than probable.

THERAPY.

It happens very seldom that the hæmorrhagic diathesis becomes cured by nature. Irrespective of the regimen and diet, which has to be, according to the stage of the disease and the individual condition of the patient, sometimes depressing and antiphlogistic, sometimes tonic and stimulant, the curative plan has to take in consideration the condition when no hæmorrhages, etc., occur, and symptomatic, in treating these last ones.

The treatment embraces, therefore—

A. *The Prophylactic and Radical Cure of the Affection.*—Here the indications are :

1. To reduce the increased action of the heart and the tendency to orgasm, which is so common to these persons and preceding frequently the hæmorrhages. Venesections, formerly made for that purpose, are now very little recommended, on account of causing dangerous bleedings. The indication is much better fulfilled by the use of digitalis, nauseating remedies and cooling salts, particularly sulphate of soda,—an old remedy, but which latterly has again been much recommended. It suits very little where the blood composition is already depressed, and exhaustion is threatening, but it is very applicable before and at the beginning of the hæmorrhages, where increased formation of blood corpuscles seems to exist. It is not certain if its medicinal action is owing to its purging quality, causing serous evacuations, or that its long continued use promotes the formation of sulphuret hydrogen in the stomach, which is capable, according to modern observations, of limiting the formation of blood corpuscles. Dr. Finger recommends for the same object the use of sulphur.

2. The second and later indication is to augment and fortify the resistance and energy of the capillaries. The most effective of the tonic and astringent remedies answering this indication are acetate of lead

and preparations of iron; also ergot of rye and ergotin deserve a trial. The acetate of lead has to be given in large doses, and forms a suitable intermediate remedy from the antiphlogistic sedative to the tonics. There are many observations in favor of the employment of iron, but it does not suit in the beginning, at the time of the congestions and vascular excitement.

B. *Symptomatic Treatment.*—The styptic remedies have to be applied if the hæmorrhages become alarming, but care must be taken not to arrest too quickly the spontaneous ones by styptics, on account of the disposition to other inner and external bleeding, as also convulsions, apoplectic attacks, etc. Better it is to allay first the vascular excitement by suitable constitutional remedies.

Of the internal hæmostatic remedies ergotin and secale cornutum have in modern times proven themselves best, both in large doses, the latter frequently in combination with sulphate of soda. The other known remedies used in other idiopathic hæmorrhages, as the mineral acids, alum, tannin, etc., have been used sometimes also with good effect. The local styptics are very numerous. The choice depends upon the locailty of the hæmorrhage, partly upon the individual excitability of the subjects, which react against some hæmostatica very violently. Tannin and the perchloride and persulphate of iron have been particularly recommended in modern times, but it has not been proven yet if they deserve the preference before the older vegetable and mineral acids.

Great caution is necessary in the treatment of the articular tumefactions by local bleeding and the local application of mercurials. These persons seem to possess a specific idiosyncrasy against internal and external use of mercurials, inner and external hæmorrhages taking place after their employment.

HÆMOPHILY OF NEWBORN, AND ITS RELATION TO THE SPONTANEOUS UMBILICAL HÆMORRHAGES OF THE SAME.

The hæmophily of newborn does not show in general any difference from that of later years, for not only hæmorrhages, ecchymoses and hæmatoms occur with them, but traumatic hæmorrhages are connected also with great danger; and how dangerous operations are at that period is proven by the danger of the circumcision and the cutting of the frenum linguere. So much more remarkable it must appear that proportionally few hæmorrhages occur in the cutting and falling off of the umbilical cord of hæmophilic newborn. In 174 hæmophilic families, with 512 single bleeders, umbilical hæmorrhages happened only in 14 individuals of 9 families. These happened in seven after the cutting of the firmly tied umbilical cord; in the other cases, out of the fallen off cord or apparently healed navel.

If we compare with this rare occurrence of umbilical hæmorrhages the fact that seven fatal and four most dangerous hæmorrhages occurred in five Jewish and one Mahommedan families after the circumcision, is certainly a very remarkable circumstance. The so-called spontaneous or idiopathic umbilical hæmorrhages happen much more frequently than in hæmophilic children, in newborn under other circumstances; namely, if by a constitutional cause a morbid blood composition and a transitory hæmorrhagic diathesis has developed itself, pathological conditions, which have certainly great similarity with hæmophily, but nevertheless are not identical with it, so that the former view is erroneous in accordance to which the umbilical hæmorrhages of newborn were looked upon as the first demonstration of the hæmophily. We possess at present an extensive literature about these spontaneous umbilical hæmorrhages, in which the above is proven by a large number of cases.

The following may be considered as differential points between the two diseases:

1. As already mentioned, umbilical hæmorrhages happen but seldom in hæmophilic children.

2. In the spontaneous umbilical hæmorrhages, primary morbid blood composition seems to come into consideration, whilst in hæmophily morbid structure or action of the vessels are rather present, preceding the faulty composition of the blood.

3. In umbilical hæmorrhages, the frequent occurrence of jaundice and organic affection of the liver is characteristic, which have never been observed in hæmophily.

4. In umbilical hæmorrhages, the hereditary character is much more seldom and less marked than in hæmophily; the manner of inheriting it seems to be different in the first, as once the mothers themselves suffer of derangement of vascular life, whilst in the hæmophily the mothers are apparently healthy, do not bleed, transmitting only the tendency to it to their male descendants. Again, there is no case on record where the disposition to umbilical hæmorrhages extended to several generations, as is so frequently the case with the hæmophily.

5. The greater disposition of the male sex, although existing in both, is much greater in hæmophilic individuals than in the other. Whilst the first shows the proportion of 11 male to 1 female, the latter only 2 to 1.

6. None of thirty-three cases in which recovery succeeded in umbilical hæmorrhages was followed by tendency to further hæmorrhages in later years, and it seems that the hæmorrhagic disposition ceased after recovery from the umbilical hæmorrhages. But different it is with the hæmophily, which lasts generally during life, or expiring in a few cases in more advanced age; and even a progressive tendency seems to follow the first hæmorrhage, conveying the belief that the disorder had commenced with the last hæmorrhage.

7. Consequently there exists in the hæmophily a permanent, mostly inherited hæmorrhagic diathesis; in the umbilical hæmorrhages but a transitory, mostly acquired one.

8. The latter seems to stand in close relation with the processes of evacuation from the passage of the fœtal to the respiratory life of the newborn, based upon abnormal processes in the liver, in consequence of which the sanguification in the liver goes on deficiently, the blood receiving biliary elements which lessen its coagulability.

9. We could, therefore, designate the umbilical hæmorrhages as a smaller degree of the hæmophily, in which the tendency to hæmorrhages exists only temporarily, not being allied to permanent conditions continuing during life.

ARTICLE III.

A Case of Contusion of Hernial Sac, followed by Abscess.

BY GEORGE C. BLACKMAN, M.D.,

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Daniel McAlister, aged thirty-five, was admitted into the Commercial Hospital on the 5th of June, 1863. For twenty-five years he had been the subject of scrotal hernia on the left side, and although he had never worn a truss, it had not interfered with his duties,—that of a common laborer. About the 25th of May last, while working on the landing, he fell with great force on an iron ring-bolt, striking the left inguinal region directly over the hernial tumor, which was protruding into the scrotum. He states that the shock was so severe that for twenty minutes he was unconscious. In a few hours reaction took place, with swelling and tenderness over the region of the hernia. The vomiting for a week was almost incessant, and he was unable to swallow even a tablespoonful of water. When admitted into the hospital, there was great tenderness over the whole abdomen, and the swelling in the left inguino-scrotal region was hard, painful and discolored. Although he vomited frequently, yet he was able to retain occasionally small quantities of beef-essence, or milk. His pulse was small and frequent, and countenance anxious. For about a fortnight the treatment consisted in the liberal use of opium, and leeches were several times applied.

On the 22d he seemed in a moribund condition, having presented for some hours previously all the symptoms of strangulated hernia. On that day, in the presence of the medical class, I made a free incision down through the sac, and gave vent to more than a pint of offensive pus. The omentum presented a very unhealthy appearance, and the ileum, that portion of the intestine contained within the sac, was highly inflamed. After the matter had been permitted to escape, the margins of the wound extending from the external abdominal ring to the bottom of the scrotum, were gently approximated and retained in partial contact by three or four sutures. The after treatment consisted chiefly of opium and beef-tea. Although the prostration was very great for forty-eight hours after the operation, he gradually began to improve, and at the end of four weeks the incision had entirely healed. The omentum did not slough, as we apprehended at the time of the operation, nor was there any escape of fæcal matter.

On examination this day, October 12th, I find some induration of the abdominal walls on the left side still remaining, but his appetite is good, his digestion perfect, and the peristaltic action of the intestinal canal unimpaired. He expects in a short time to engage in his ordinary labors.

The late Mr. Aston Key, of London, published in the Guy's Hospital Reports for April, 1842, a paper "On the proceeding to be adopted in a case of injured intestine from a blow upon a hernial sac." His attention had been directed to the treatment which these injuries demand, as he had observed three cases which terminated fatally, and a successful issue in two instances where measures were taken to rescue the patient from the danger attendant upon fæcal extravasation. But as in our own case the effects of the blow may fail short of a rupture of the intestine, and be analogous to the contusion of other tissues. The collapse, vomiting and abdominal tension are not positive evidence that the intestine is ruptured, as these symptoms have often shown themselves after a severe contusion of the abdominal walls alone. In our patient the coats of the intestines must have suffered contusion, and it is highly probable that the hernial sac and its contents became gorged with extravasated blood. The inflammation and suppuration following, involving the intestine, omentum and coverings, together with the bruised integuments, were sufficient to account for all of the symptoms which presented. No fæcal matter was discovered at the time of the operation on our patient, and he is positive that none has escaped since, as must have been the case had the intestine been ruptured. The following quotation from Mr. Key's article shows that he was in error in supposing that in cases where the intestine is not ruptured the effects must be transient:

> "It may be urged that the symptoms following upon a bruised intestine, or even upon a contusion of the testicle, may closely simulate those of a ruptured bowel. After these injuries, pains of a severe kind are felt about the scrotum and groin, the parts can not endure rough handling, and vomiting sometimes follows. But these symptoms are transient; the shock passes away, and reaction ensues. The peculiar distress of countenance characteristic of ruptured bowel is wanting in the less severe injuries of these parts; and it is only the continued and increasing urgency of symptoms that fail to be relieved by the mild means resorted to, that should induce a surgeon to take the more serious view of the injury."

In our own patient unequivocal collapse and pain followed the formation of vitiated pus, differing but little, if at all, from the same symptoms attending extravasation of fæcal matter from a ruptured or sloughing intestine. As further evidence of the great difficulty in forming a positive diagnosis as to the existence of visceral lesion in connection with contusions of the abdomen, we might refer to the cases detailed by Mr. Alfred Poland in Guy's Hospital Reports, 1858, in which there was an immunity of symptoms for several hours. In one of these, when the duodenum was ruptured completely across, the patient walked a mile. Mr. Poland has collected all of the cases which have been reported under the head of "Blows on Hernial Sac, with Ruptured Intestine in Sac." They are but fifteen in number, and as Mr. P. observes, they suggest the practical hints in all cases where there has been a blow on a hernial sac, never to attempt reduction, and if the symptoms be urgent, the surgeon should explore the sac at once, whether it is empty or not. In a case similar to the one we have above reported, the operation should have been earlier performed, but it was prevented by the unwillingness of the patient to submit. [As Mr. Poland's paper is not easy to be obtained, we give on the next two pages his analysis of fifteen cases, as published in Guy's Hospital Reports for 1858.]

On comparing the dates of publication of Mr. Key's and Mr. Poland's papers, which, so far as we are aware, constitute the sum total of our surgical literature on this subject, it will be seen that

Mr. Key's paper was prepared some sixteen years before that of Mr. Poland, and his remarks were based upon five cases only, whereas Mr. Poland has collected fifteen, six of which bear strongly against a practice sanctioned by Mr. Key. We refer to the attempt to reduce

CASES OF BLOWS ON HERNIAL SAC,

	Cause.	*Primary Effects.*	*Secondary Effects.*
1. Man, with large scrotal hernia.	Fall from ladder, struck hernia.	Violent pain and tension.	....
2. Middle aged man, with scrotal hernia.	Pushed by pole of a carriage.	Extreme collapse, like dying, vomiting, pains over whole abdomen.	Contents were returned, but swelling in the scrotum of same size.
3. Serjeson, young man.	Ran against post, and struck middle of abdomen.	Felt pain and became faint, then crawl'd 100 yards; collapse; vomiting; tumor in groin.	....
4. Man, with inguinal hernia.	Kicked by wife on hernia.	......	Mortification. .. ....
5. J. L, aged 29, congenit'l hernia.	Ran against post, injuring scrotum.	Vomiting.	Peritonitis. .. ....
6. T. Jones, æt. 40, sailor, small bubonocele on right, size pigeon's egg; reducible scrotal on left, apparently omental, and existing for years.	Fell on right groin against a piece of wood.	Great collapse and pain; worked for half an hour after injury, carrying several sacks of flour, and then became faint.	Inflammatory symptoms: vomiting; fæces through wound on the fourth day: gradual subsidence of the symptoms; granulation of wound.
7. M. Hayes, æt. 40, scrotal hernia, denied previous existence of hernia.	Kicked by a man on hernia, over scrotum.	Collapse for five hours previous to admission, and then not rallied; pain along cord, and hernia in scrotum.	Peritonitis. .. ....
8. John Cox, æt. 40, reducible scrotal hernia, wore no truss.	Kick from colt on hernia.	Walked to the hospital with difficulty; then collapse; pain in sac.	Rapid peritonitis; extreme prostration.
9. Stout, middle-aged man, reducible right scrotal hernia; wore a truss.	Received blow on truss-pad, knocking truss aside, and hernia immediately descended.	Pain and faint; sick; hernia partly returned, and sent to hospital on third day.	Vomiting, constipation, peritonitis; subsidence on 3d day of admission, 6th of accident; copious fæces thro' wound for four day, then passed naturally.
10. Cabinet maker, æt. 40, right inguinal hernia two years, wore truss, no descent for four months.	Pushing heavy table, slipped, truss striking edge of table.	Great pain; fainted; walked home in two hours; brought to hospital; sac empty; collapse; pain and nausea.	Acute peritonitis and incessant vomiting.
11. Congenit'l hernia, omentum and bowel adherent.	Struck groin against post.	Fainted.	Peritonitis. .. ....
12. Irreducible scrotal hernia.	Blow on hernia.	.. ..	....
13. Carriage driver, æt. 60, old hernia in the left groin.	Kick by horse.	Collapse; great pain and tympanitis.	Peritonitis. .. ....
14. Man, bubonocele, wore truss.	Blow on truss-pad from the shaft of a long hammer.	Restlessness, excruciating pain, and clammy sweats.	Next day great anxiety: pulse frequent, small; peritonitis.
15. Man, hernia; no truss.	Pushed violently against wall by a horse.	Cheerful; no collapse; violent pain in sac; no bowel in hernial sac.	No bad symptoms for forty hours; sudden prostration, and death in four hours.

the contents of the hernial sac as soon as reaction has taken place. He states that there can be no objection to this, if it be done with gentleness; that the danger of abdominal extravasation will not be increased by replacing the injured bowel at the neck of the sac, "for,

With Ruptured Intestine in Sac.

Treatment.	*Post-mortem Appearances.*	*Reference.*
....	Death in four hours, ileum in the sac, ruptured.	Sir A. Cooper, Hernia.
Hernia returned.	Death in three days; laceration of ileum and mesentery 5 inches in extent; blood in sac, and 3 quarts of blood in abdomen.	Ditto.
Tumor in groin easily returned, but soon came down again.	Death in two days; an irregular aperture in ileum, admitting finger; blood in sac and abdomen.	Ditto.
....	Death.	Paris and Fonblanque, Med. Juris.
Hernia reduced, and he walked into another ward.	Death in twelve hours; two small rosebud-looking wounds in lower part of ileum; plastic effusion and partial adhesion to surrounding parts; peritonitis extensive; gas and serous fluid escaped on opening abdomen; body warm.	Guy's Hospital.
Local depletion; calomel and opium; R. hernial sac laid open, on second day, contents serum; no blood, no fæces, no odor; intestine at mouth of sac, left alone.	Recovery in ten weeks.	Guy's Hosp. Reports, April, 1842, p. 267.
Hernia reduced with facility; leeches; calomel and cathar. ext.; hernia again descended; V.S.; blister to abdomen.	Death in thirty-six hours; ruptured jejunum one and a half inches above internal ring; fæcal effusion in abdomen, and peritonitis; hernial sac contained some intestine, was large and of long standing.	B. B. Cooper, Surgical Essay, p. 275, (Guy's Hosp. Reports, April, 1842, p. 272.)
Hernia returned to the mouth of sac; leeches; castor oil; calomel and opium.	Death in thirty-four hours; rupture would admit quill in ileum, 7 inches from termination, lying near sac; fæcal effusion and peritonitis; opening abdomen, gas escaped.	Guy's Hosp. Reports, April, 1842, p. 274, Prep. 1851(88).
Hernial sac laid open on third day; no intestine visible, but serum foretold disturbance of sac; no fungoids.	Recovery at end of four weeks, and able to wear truss.	Ditto, p. 264.
....	Death on fourth day; ruptured ileum, one and a half feet from cæcum, size of goose-quill; fæcal effusion; peritonitis.	Pathological Transactions, vol. v., p. 170, (Mr. Shaw.)
....	Death on third day.	Sir C. Bell, quoted by Shaw, ditto.
Sac laid open, the bowel found ruptured; Lembert's suture.	Death within twenty-four hours after operation.	Jobert.
Reduction attempted; leeches applied.	Death on second day; small bowel completely torn across and floating in abdomen; effusion of black matter; intense peritonitis.	Jobert.
Clyster returned, mixed with blood; castor oil; freely bled.	Death in forty-eight hours; circular aperture in ileum, size of goose-quill; castor oil floating about abdomen; peritonitis.	Travers, p. 36.
....	Death in forty-four hours; ruptured bowel, one inch long.	Cæsar Hawkins (*Lond. Lancet*, 1839–40, page 327.)

should sloughing of its coats ensue, the slough may be walled in by adhesion of the surrounding peritoneum, and fæcal extravasation be prevented ; or, should this salutary process of adhesion fail to insulate the slough, the sac will receive the fæcal matter, and quickly give intelligence of the impending mischief by the tumefaction that will ensue within the scrotum." This reduction, of course, he would recommend only in those cases in which there is merely contusion without rupture of the intestine, which condition he decides by the absence of collapse, vomiting and abdominal tension, or the speedy recovery of the patient from the state of collapse. We have already seen how fallacious these signs are, and a careful examination of the cases collected by Mr. Poland must convince every surgeon of the impropriety of attempting reduction after a blow on a hernial sac.

NOTE.—Since writing the above I have seen a case where a blow upon the pad of a truss over an empty hernial sac gave rise to inflammation and consolidation of a portion of the inguinal canal, not sufficient, however, to prevent the hernial protrusion, but sufficient to interfere with the wearing of a truss. After forcing the consolidated portion of the canal to the internal ring, I invaginated a portion of the integument of the scrotum by means of Rigg's instrument. The patient is doing well, and we hope for a radical cure, although we have less faith than formerly in the modern operation for a radical cure. Aided by the plug already existing, our success may be more complete.

Proceedings of Societies.

Proceedings of the Cincinnati Academy of Medicine.

Reported by W. T. BROWN, M.D., Secretary.

HALL OF ACADEMY OF MEDICINE, Sept. 14, 1863.

Scarlet Fever with Dropsy.—Dr. Carroll reported several cases of scarlet fever. In one family he had six cases. One child, ten years old, was but slightly affected. He merely gave him a purgative of calomel and jalap, and a mixture of sweet spirits of nitre, and antimonial wine. He got well. But in a week or two afterwards, he was attacked with inflammation of the tonsils and croup. He did not bleed him, but prescribed one-sixth of a grain of tartar emetic and one grain of calomel every twenty minutes until he vomited. In six hours he was relieved. On last Saturday his face became swollen and dropsical. Yesterday he feared convulsions, and gave him a purgative. At 11 o'clock he had a convulsion, and another in the evening. Believing the abstraction of blood a saving remedy, he bled him and purged him. After 12 P. M., he slept calmly and is now almost well.

Dr. Williams inquired of Dr. Carroll if he examined the urine in this case.

Dr. Carroll said he did not.

Dr. Williams said one sequela of scarlet fever is inflammation of the kidneys and albuminuria. He said two cases recently came under his observation, patients of Dr. Schmidt, who told him he had a large number of such cases, and they nearly always died.

Dr. Carroll said he had had lately eighteen cases of scarlet fever; three proved fatal. He had seen a larger number proportionally of dropsical cases than ever before. The chlorides he had no confidence in, particularly chlorate of potash. He prescribed antimony, nitrate of potash and purgatives, also ordered warm fomentations.

Dr. J. B. Smith said he had rarely seen dropsy follow scarlet fever, unless there was free desquamation. He had six cases last week. Thought we knew very little about the treatment. In regard to chlorate of potash, it certainly has an effect in inflammation about the mouth and throat, and it lessens the frequency of the heart's action, without producing depression. In scarlet fever he made but little use of purgatives, because there is a tendency to diarrhœa. There is more or less albumen in the urine during the stage of convalescence, but less where there is free desquamation. He did not look upon it as a serious complication, unless there were other troubles. The Doctor also referred to a case in the *London Lancet*, reported by Dr. Robert Lee. The woman was in the fourth month of pregnancy, and had albuminuria. Dr. Lee advised the induction of premature labor, which was brought about. Afterwards the albumen gradually disappeared and the woman got well. Dr. Smith was of the opinion that in cases of albuminuria in pregnant women, if we could prevent their having convulsions by inducing premature labor, we were perfectly justified in doing so. The figures show conclusively that no one plan of treatment is successful.

Dr. Carroll said he never had lost a patient with dropsy following scarlet fever. He made use of calomel, digitalis, squills and blood-letting, either by means of leeches or the lancet.

Dr. Smith said he never had lost a patient with dropsy as a sequel of scarlet fever.

Dr. Murphy said the American physicians are the only ones who claim to cure scarlet fever. We do not do it any more than we cure typhoid fever. Its pathology is not positively known. It is a poison. producing a ferment, or something, in the blood. No two epidemics are alike. He was at a loss to diagnose between diphtheria and scarlet fever in many cases. He was attending a poor woman's boy at the corner of Third and Sycamore. The surface was covered with a fine scarlet eruption; he had smart fever, a ragged velum pendulum palate, pillars of fauces ulcerated, yet there was no strawberry tongue. This strawberry tongue he looked upon as pathognomonic of scarlet fever. For this patient he prescribed twenty-five drops muriate tinct. of iron every four hours, a gargle for the throat and beef-essence. The boy got well. He did not consider it a case of scarlet fever. Scarlet fever is a disease, than which no other has so many complications; rheumatism of the joints and heart is the most common complication as observed by British physicians.

Dr. Gans said we do not cure scarlet fever,—we only guide it; and this we may say in regard to the treatment of any disease. His practice was only with this view. If inflammatory, he made use of antiphlogistics; if of a typhoid tendency, he made use of stimulants. There is no specific treatment. The only rational treatment is to observe the course and tendency of the disease, and treat it accordingly; not to treat all epidemics alike. The difference between scarlet fever and diphtheria is pointed out by many writers. He depended a good deal in his diagnosis upon the strawberry tongue, as observed by Dr. Murphy. The eruption in scarlet fever is peculiar; also the affection of the throat. We have no diphtheria with ulceration. He said he had seen many cases of dropsy following scarlet fever. He never bled locally or generally. He prescribed iodide of potash and digitalis. He never lost a case. He had last winter a patient seven years old, with rheumatism following an attack of scarlet fever. She had no serious affection of the throat, but as the rash disappeared. rheumatism came on. He was now treating a child who had a mild attack of scarlet fever. There were two children in the family. They had a very light eruption; strawberry tongue not well marked. They had some little difficulty in swallowing. As they convalesced whooping cough set in. The eldest child soon became worse, had palpitation of the heart, no doubt pericarditis; no appetite; could not sleep; had diarrhœa. He prescribed cooling remedies, calomel and digitalis; did not control the action of the heart; gave tincture of veratrum viride, three drops three times a day; had no effect; ordered it every three hours; patient is now improving; pulse 98.

HALL OF ACADEMY OF MEDICINE, Sept. 21, 1863.

Electro-Galvanism in Uterine Hæmorrhage.—Dr. Stevens reported the following case: Six weeks ago, he was called to visit a colored woman threatened with abortion. She had pain and some slight hæmorrhage. He found she had previously aborted at least once or twice, although she was the mother of two healthy children. Under the use of anodynes and rest she was temporarily relieved; but during his subsequent absence from the city, these symptoms returned and the abortion was accomplished, attended as she states with very great hæmorrhage. Two weeks afterwards, she was able to be about her room, but on resuming attendance upon the case, Dr. S. found a disposition to a return of the hæmorrhage upon the least exertion. He suspected a portion of retained placenta, but was unable to discover any on careful examination. He enjoined persistent quiet, and directed the usual remedies, as ergot, opium, acetate of lead and gallic acid. Under such treatment there was no difficulty in arresting the bleeding for a time. But one week ago this evening, owing to some imprudence, there was a fresh relapse, and when he reached the patient she had repeatedly fainted, and was apparently completely exhausted with the profuse loss of blood. He directed ice applications to the pubic region, and gallic acid with opium, but without any impression. At the suggestion, of Dr. Gans, however, at this time, he concluded to try the effects of the electro-galvanic battery. Accordingly, the experiment was made, applying one pole of the battery moistened, to the sacrum, and the other over the fundus uteri. Almost immediately the patient described the effects of the electric current as giving a strong sense of constringing throughout the uterine region, and the bleeding was promptly arrested. The Doctor remained with the patient for half an hour, during which time there was a slight return of the hæmorrhage, which was immediately arrested by a few turns of the battery; and during the succeeding twenty-four hours there were two or three slight returns of the bleeding, but the battery was regularly and promptly sufficient to relieve the difficulty, and this was the only remedy used in the case, except such stimulants and nourishishment as was indicated to bring up the strength of the patient.

Puerperal Convulsions.—Dr. Tate reported the following case: Friday, Sept. 25th, 11 P. M.—Called to see Mrs. M., an American woman, æt. 22, in labor with her first child. She had a large head, light hair and blue eyes, and was rather a stout woman. In a short time I proceeded to make an examination per vaginam, to which the patient seemed quite averse. On introducing the forefinger, I found

I could not reach the os uteri, and while attempting gently to introduce the second finger, the patient complained a little, and immediately went into a frightful convulsion, attended by shocking contortions of the muscles of the face, rigid contractions of those of the extremities, entire loss of consciousness, and followed by stupor. I found the head of the child presenting, and the os dilated to the diameter of a dime, and not soft or pliable. I bled her to the amount of twenty-eight ounces, and sent a messenger for chloroform. The blood was evidently rich in fibrin and red corpuscles, and soon formed a firm clot. The first convulsion lasted some six minutes. At midnight the patient had a second convulsion. A stimulating injection was now thrown up the rectum and cold cloths applied to the head. The fœtal heart soon after this fit was slow and irregular, but at the end of twenty minutes had recovered its normal action. 12.40 A. M., third convulsion. The left eye had become considerably injected, and I observed for some minutes before the last paroxysm that both eyes moved incessantly from side to side, while there was an occasional twitch of the muscles of the lids. The rational and perceptive faculties were now lost in a sort of stupor, which continued between the paroxysms. There seemed to be now and then a feeble uterine contraction. Bled a second time to the extent of twelve ounces. On standing awhile, the blood formed a firm clot, and with about the usual amount of serum. At 1 A. M. there seemed to be some return of consciousness. 1¼ A. M., patient continues as if taking a sleep, which is interrupted every ten minutes by uterine pains, causing her to cry out and turn over in bed. Fœtal pulse beating well. Had two copious, dark, offensive stools. Signifies her assent to questions by articulate sounds—not words, and feels at a friend's hand when pains come on. Os uteri dilated to the size of a dollar. 3 P. M., has had four convulsions in quick succession, continuing as the head presses on the perineum. The messenger having returned, the patient was now put under chloroform, and did not know when her child was born. The child was born alive at a quarter before five. Placenta followed in a few minutes, attended by a small loss of blood. The patient now recovered her faculties somewhat, recognized her husband and answered a few questions. At 5½ A. M., all things appearing well, I left for home, with directions, should the convulsions return, chloroform should be given. At 1½ P. M. I returned, and found that the woman had had a return of the fits soon after I left, and that in the interval of my absence she had had no less than six paroxysms of convulsions. The friends thought she seemed to have pain in her back like after pains just before the fits would come on. Pulse 100. Took chloroform during my absence, so as to be twice fully under its use. A convulsion is just over as I enter, and she has bitten her tongue and is now entirely unconscious. I put the patient fully under a mixture of ether and chloroform, and emptied the bladder of a pint of urine. I then introduced my hand into the vagina, and my fingers into the uterus, with the view of taking out of it any clots which might be there, but found none. Has slept quietly for half an hour; pulse 100, not feeble. 2¼ P. M., patient to take two drops of croton oil. She has become very restless. 2½ P. M., put fully under chloroform. 3¼ P. M., has had two dark, copious, offensive stools, containing undigested corn, her pulse 135. 7 P. M.—A little restless, has had no fit since the alvine discharges, pulse 100, skin cool. Takes a drink, and is becoming again conscious. Ordered to take forty drops of paregoric and twenty drops of laudanum, and to repeat, if necessary, to keep her quiet.

Saturday, 8 A. M.—Has passed a fair night, without a return of the convulsions. Took two doses of the paregoric and laudanum in the night; pulse 80, skin cool. To have a little panada and afterwards another dose of the anodyne, if necessary. 5 P. M.—Quite rational, pulse natural, skin cool, passed her urine. Took a little panada. To have laudanum, if necessary to procure sleep to-night.

Sunday morning.—Patient convalescent, mental faculties fully restored.

Monday.—Continues to improve, milk secretion established.

History.—Had had a headache for some days, and feet so swollen she could not wear her shoes. Her friends thought her face had a swollen and puffed appearance. His reasons for pursuing the treatment he did in this case were as follows:

First, Made use of depletion to relieve the brain from congestion.

Second, To protect the brain from the effusion of blood in subsesequent convulsions.

Third, To relax the os uteri.

These beneficial results were realized. She went through her confinement and came out unharmed. The influence of chloroform cut off the point of irritation and the cerebro-spinal axis. There were three causes or sources of irritation, he thought, keeping up the convulsions after her delivery. First, the urine in the bladder; Second, clots of blood in the uterus; Third, the condition of the alimentary canal. He emptied the bladder with the catheter, introduced his hand *into the vagina and his* fingers into the uterus to remove clots, then prescribed two drops of croton oil to act on the bowels, and here he found the cause of the convulsions, viz.: some undigested corn. The Doctor had some of the urine, containing a large amount of albumen.

Electro-Galvanism in Obstetrics.—Dr. Gans remarked that the case which had been reported by Dr. Stevens, in which he used the electro-magnetic battery, was one of great interest. He had used the same means in obstetric cases, not alone in hæmorrhages, which often seem to baffle all our efforts, but in other cases. This subject he said was too lengthy to enter upon now, but he would refer the members to a paper read by him before the State Medical Society last June. He had two cases since he read that paper. In one case the woman was flooding very badly. She was almost pulseless. He made use of the electro-magnetic battery, and in five minutes the hæmorrhage was arrested, and completely controlled in half an hour. The second was a case of abortion similar to the one reported by Dr. Stevens. He was called three weeks after the abortion had taken place, but the placenta had been retained until this time, when it came away followed with great hæmorrhage. The same means (the electro-magnetic battery) made use of, controlled it.

* * *

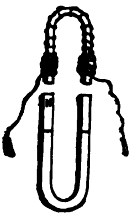
A Substitute for Brandy in Cases of Exhaustion.—When lean beef, chopped up, is inclosed in a jar, and subjected for an hour or more to heat, it separates into three portions—fat, fibre, and liquid essence. The last is strained off, and the fat separated by means of blotting paper. It is a clear, amber liquid, of an intensely aromatic smell and taste, very stimulating to the brain. Different samples of meat yield various quantities of it, and it contains a variable proportion of gelatinous matter; but when prepared from old, lean meat, it is darker in color, and contains scarcely any gelatinous matter. When evaporated to dryness, it yields about one-sixteenth of solid residue, but this, too, is subject to great variety. The extract soon effloresces with the saline matter contained in the meat.

This is not intended as a substitute for common beef tea, nor for common broths or soups, the gelatinous elements of which are of the highest value, but it is recommended as an auxiliary to and partial substitute for brandy in all cases of great exhaustion or weakness, attended with cerebral depression or despondency. It is free from anything that loads the stomach, and appears to exert a rapid and remarkable stimulating power over the brain. It is, therefore, an antidote to the conditions which are apt to lead, through mental depression, to the pernicious habit of spirit-drinking. In the sequelæ of severe and exhausting labor, it is invaluable.—*Dr. Druitt—Trans. of the Obstetrical Society of London, vol. iii.*

Special Selections.

Faradization.

It is now over thirty years since the discovery by Faraday, that wire insulated by a covering of silk or cotton, and encircling a piece of iron, becomes electric at the moment of bringing a magnet into contact with, or separating it from it; the wire being unconnected with either, and remaining unaffected, but on the movement of the magnet to or away from the iron within it. The currents thus induced, run in the opposite directions,—that is, at the end of the wire which gives positive electricity on the application, shows negative on the removal of the magnet, and *vice versa* with the other extremity of the wire; hence the name "to and fro" currents. They become much more perceptible when the iron is bent, and a horse-shoe magnet employed to touch both ends at the same time, as shown in the margin.



Like currents are produced in the wire when placed around the magnet, and its poles touched with soft iron.

Temporary or electro-magnets evolve similar phenomena.

And voltaic electricity from a pile, or a simple pair of zinc and copper plates, when passed through an insulated coil of wire, also generates at the moments of making and breaking contact the same to and fro currents in another coil placed over it, or with it on the same spool, although not otherwise connected.

Rheotomes.—It therefore follows that to have continuous induced currents, the contacts and withdrawals of the magnet, or the interruptions in the stream from the voltaic plates, must be numerous and speedy; contrivances for this purpose are styled rheotomes, (*i. e.*, cut-currents,) and have taxed the ingenuity of scientific men in all parts of the world.

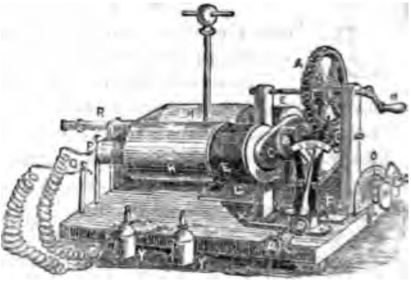
It will hence be observed, that although these sympathetic currents are always produced from spools of insulated wire, yet that there are three modes of inducing them, viz.: the permanent magnet, the electro-magnet, and the electric coil, the two latter requiring voltaic electricity.

Dr. Duchenne, of Boulogne, who has devoted a great deal of attention to this subject, and whose large work is without doubt the most complete extant, extensively employs these induced currents, and in honor of their discoverer has denominated their application Faradization, which happy appellation has been at once adopted by the profession at large. When from a permanent magnet, he calls it Magneto-Faradic; and if induced from a battery, Volta-Faradic.

Faradization.—After this explanation it will be seen why by Faradization is only to be understood the employment of induced or discontinuous electric currents,

Magneto-Electric Machines.—In these the insulated wire is put upon wooden spools, and slipped over the ends of a piece of bent iron, which are turned around in front of a horse-shoe magnet. They are decidedly the cleanest and prettiest instruments for medicinal purposes, and the ones most frequently employed in this country. They come to us from the United States, where they are manufactured cheaply in great numbers, and extensively employed both by medical men and the community at large; and all those that I have seen are made to transmit the undivided to and fro currents as generated. The electrodes (or handles), being alternately positive and negative, pass the electricity backwards and forwards through any portion of the body placed between them. In more perfect instruments, however, of which those of the English makers are not excelled in the world, control may be exercised over one of these sets of currents, and a positive and negative electrode be produced at pleasure, thus enabling the operator to pass the stream in any direction desired. This is of great advantage, for a current running with a nerve is much less excitable than an inverse or mixed one.

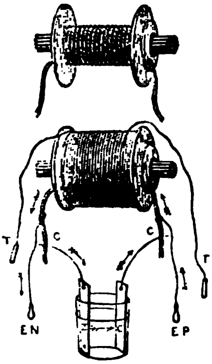
In this instrument, invented and employed by Dr. Duchenne, the spools are placed over the magnets, and contain, first, eighty feet of insulated copper wire $\frac{1}{50}$ inch in diameter, over which is wound nearly two thousand feet of another of $\frac{1}{75}$ inch. In both of these wires are generated the same to and fro currents, which, however, vary greatly in character, those from the larger being much more powerful, and from the longer and smaller, more penetrating.



M. Duchenne's Magneto-Faradic Apparatus.

Volta-Electric Apparatus.—Soft iron becomes magnetic when surrounded by an insulated coil of wire through which is passing a stream of voltaic electricity; and an instrument could be made precisely like the one with the horse-shoe magnet, but with a power much greater, depending as it would on the strength of the battery employed. But the turning of a handle is unnecessary with a battery, as, to produce Faradic currents, we have merely to place another coil over the temporary magnet, the intervening wire being no hindrance to their development. The top coil must also be insulated, and be unconnected with either the wire beneath, the iron, or the battery.

The current produced on breaking contact runs in the same direction as the battery current, and that on its junction in the opposite way. Faradic currents, as already stated, may be produced by a coil of wire, and pair of plates, alone, but the inducing power of an electric magnet so far exceeds it, that the soft iron helix is never omitted in these instruments, but is withdrawn when a diminution of strength is required. If a bundle of annealed wires, each insulated, be substituted for the bar of iron, forming, as they would, so many distinct magnets, the currents would be still farther intensified; they must not, however, be encircled by any metal which partially does away with this increase of power.



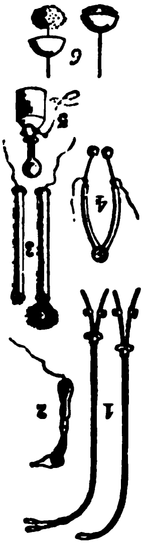
The wood-cut is intended to illustrate the formation of the coil machines. The top spool has its inducing wire arranged to receive the finer, which is placed over it in the second. The rheotome is not inserted. The electrodes T would give the to and fro currents on separating or connecting the wires at C.

Extra Currents.—The Volta-electric apparatus possesses an advantage over the magneto-electric instruments, in generating an extra current of induction in the larger wire at the instant that the battery is cut off, and unlike that induced in the finer wire, it runs but one way, which is the same as that of the battery; it lasts but for an instant, and may be felt strongly at the disks E N, and E P. It is an induced current in the inducing wire, after each stoppage of the electricity from the Voltaic plates, and is very convenient as a therapeutic agent. And if the to and fro currents, formed in the finer wire, can be divided at pleasure, it gives a very perfect instrument with three sets of currents, the to and fro, and single currents, from the long fine wire, and the extra current from the coarser. Those from the first, according to Duchenne, being more penetrating and having an especial action upon cutaneous sensibility, and likewise upon the retina; and those of the larger wire upon muscular contractibility.

Induced currents differ, as a therapeutic agent, from Voltaic electricity, in moving alternately in opposite directions, and in being a quick succession of minute shocks; it is to the latter alone, however, that its superiority is due, for effects similar in every respect may be obtained from a small galvanic battery, if its current be made discontinuous by means of a rheotome.

Induced electricity is decidedly medical electricity, and, apart from its other advantages, is superior to all other forms in producing powerful muscular contractions, without exciting cutaneous sensibility, causing shocks, or tearing the capillary vessels. And its employment is unaccompanied by risk of altering the tissues by chemical action, an effect which is liable to occur with continuous Voltaic currents.

Electrodes.—By this term is understood the poles or handles attached to the ends of the wires, by which the application of the electricity is made to the different parts of the body. The pair most universally applicable are brass cylinders with wooden handles, as shown at 5; they are intended to hold sponges saturated with salt water. Duchenne's *cups and sponges, as may be seen, are much larger than those ordinarily employed.* Disks, balls, cones of metal, and wood, similar to those used with frictional electricity, may all prove useful in Faradization. The excitors (fig. 1.) are intended for the bladder, and when made a little less curved, answer admirably for Faradizing the os uteri in amenorrhœa. The wires are run through an elastic catheter with a division to keep them isolated. Fig. 2. is for the ear; the cone should be made of wood or ivory. Fig. 3. is a wire brush for stimulating the skin, and producing counter-irritation. It should be attached to the negative conductor, when the apparatus allows of divided currents.



A pair of very convenient sponge electrodes may be made by cutting a hollow India-rubber ball in two, and inserting a sponge into each half, as shown in fig. 6.

In applying electricity, it must be recollected that the stream passes into the body at the positive electrode, and out at the negative one, on its way to complete its circuit.

By a direct current is understood one that follows the course of a nerve and consequently of nerve force; it is produced by placing the positive conductor on a nerve nearer to its origin in the brain or spinal cord, than the negative one. Or, in other words, to cause a direct current, the negative electrode must be placed upon a nerve nearer to its point of distribution than the positive one. Inverse currents, as their name implies, run in a contrary way to nerve force, and the electrodes are reversed to produce them.

Direct currents, although occasioning contractions in the muscles to which a nerve is distributed, has the effect of decreasing for a time the excitability of the nerve itself. It is owing to this important power, that it is so desirable to be able to employ them alone; for the reverse currents of the to and fro instruments stimulate and counteract this effect. But when these double currents are very intense, the inverse become overpowered by the direct.

From these facts it will be deduced that feeble and long continued to and fro currents are best adapted to rouse vitality and exercise a tonic influence upon weak or atrophied tissues.

The human body is not a good conductor of electricity when compared to metals; its most impregnable part, however, is the epidermis, the resistance of which when dry has been placed by Lenz, after many experiments, as high as thirty-six times that of the conducting wire alone. The skin once passed, however, he found the structures beneath not to exceed five times. Persons accustomed to working with Voltaic batteries, are perfectly aware of this great difference, from the increased facility and power with which the current enters the hands through the least scratch or abrasion of the cuticle, and the severe pain it occasions at these points.

Electro-Puncture.—Faradization through steel or platina needles passed into the deeper tissues is one of the most efficient modes we possess of localizing the current and stimulating them to healthy action, or restoring them to lost contractibility. Triangular shaped needles, similar to those employed by glovers, are best adapted for the purpose; when of steel they should be plated with gold, for their oxidation in the wound during the passage of the electric currents, not only increases the pain, but leaves an indelible stain behind them. Bloodvessels should not be transfixed, nor is it absolutely requisite to pierce a nerve; it is quite sufficient if the needles come in contact with it.

Baths.—Electricity penetrates the skin without difficulty through water, and the application of to and fro currents in a bath is a powerful means of arousing the action of the system in cases of debility. The hip bath, foot bath, or merely inserting the hands into a basin of water, also gives a ready entrance and exit to the currents, if one conductor be put into the vessel, and the other, a moist sponge, be placed above the part to be Faradized. Salt increases the conducting power of the water, and it may be conveniently added to it when operating through the hands or feet.

Sponge Electrodes.—Next in point of penetrability are sponges moistened with salt water, which, when pressed firmly upon the wet skin, act as good conductors to the deeper tissues without electrization of the cutaneous surface, which, however, becomes momentarily affected on bringing the electrodes into contact with it, or on removing them, whilst connected with the working instrument; this may be readily obviated by crossing the wires of the two poles until the sponges are placed.

Electro-Cutaneous Excitation.—When the skin is dry beneath one or both electrodes, the currents flow chiefly along or within its surface, and when intense, act painfully upon the superficial muscles beneath. Before Faradizing the skin, all humidity should first be absorbed by means of a little rice powder or corn starch, then having placed a moist conductor on some other portion of the body, apply a dry one to the part to be excited, or, holding it in the hand, pass the back of the fingers lightly over the surface. The application of the metallic brush, however gentle, is a much more severe mode of arousing sensibility, and is very painful when the cutaneous surface is struck slightly with the extremities of the wires. Duchenne calls this latter *electric fustigation,* and *electric moxa* when the ends are left in contact with it.

Of the Nerves.—The muscles are much better conductors of electricity than the nerves; therefore, when it is desired to apply them to the latter, it should be done where they are most superficial, and in contact with tendons or aponeuroses, or surrounded by cellular tissue; and even in these situations but a portion can be made to traverse the nerves.

Weber has proved, after many interesting researches, that although Faradization of the spinal marrow alone, produces violent contractions in the muscles of the trunk, these contractions arise, not from electricity, but from nerve force brought into action by the stimulus to the cord. *And that neither contractions nor heat can be observed in nerve matter on electrical excitation.*

Indeed, currents passed through the sympathetic, or through the organs to which it is distributed, produce contractions in the muscular tissue of the latter, which, however, differ from those of the voluntary muscles in being less energetic and more permanent, and in succeeding each other in an order corresponding to their functions, which they increase.

Of the Muscles.—Faradization of the muscular tissue is said to be *general* when produced through the nerves, and *local* when applied to the fibres themselves; the latter is more superficial, except when a powerful current is employed. Next to electro-puncture, local electrization is best accomplished by means of the sponge electrodes wet with brine, and pressed firmly upon the skin within a few inches of each other, moving them frequently until every part has been brought under its influence.

Excitation of the periosteum is peculiarly painful, and should be avoided when possible.

Paralysis.—Ever since its discovery, Faradization has been recommended as a remedial agent of great efficacy in paralysis, both local and general, stimulating the nerves and muscles in the former, into renewed life and activity, and supplying them in the latter with electrical, in lieu of deficient nerve force; thus keeping up their action and development, and preventing atrophy, whilst nature is restoring the power of the nervous centres. It can not, however, be made immediately available as in all forms of local paralysis. In both local and general, the to and fro currents are particularly adapted, and should be applied directly to the parts affected, without passing them through the seat of any recent cerebral or spinal injury. They should be employed for short periods, and be frequently repeated.

Where there has been a separation of a nerve by injury, or even a loss of its substance, with years of permanent paralysis, the patient application of electricity will occasionally be found to restore the action of the muscles supplied by it, showing that there has been regeneration of the nerve filaments in the cicatrix, and that want of stimulus alone has prevented the return of power. After accidents of this kind, the rule is, that when muscular contraction has not been destroyed, the parts should be submitted, as soon as possible, to local electrization; but when lost and insensible, from four to ten months must be allowed for the perfection of the nerve fibres.

Paralysis of the nerves of smell, taste, sight, and hearing, have each occasionally been restored by electrical excitation.

I have had some encouraging, although but partial successes, with it, in loss of smell from chronic catarrh, in which I employed the double currents, placing one sponge over the nostrils, and the other at the nape of the neck.

Dr. S. Wells recommends it in cases of strabismus dependent upon paralysis of muscles of the orbit without cerebral lesion; he directs one moist sponge to be placed on the lid over the weakened rectus, and the other to the temple, and begins with applications of five minutes duration daily, increasing them gradually to twenty minutes.

In deafness without evident cause, but deficient cerumen, Faradization is well worthy of a trial. The ear should be filled with water, and weak and slow currents be passed through it from the back of the neck, being careful not to allow the conductor to touch any portion of the meatus or tympanum.

Local paralysis of the bladder with incontinence of urine, either in adults or children, may often be successfully treated by means of the to and fro currents passed daily, for fifteen minutes, between the interior of the bladder and the pubes, employing the excitor fig. 1, and a sponge electrode. It seldom requires more than a single application to effect a change, or over five or six, to give permanent relief.

In tic douleureux, the nerve may be deadened by strong direct currents, (extra currents being the best,) applied by means of moist conductors.

Faradization in lead palsy is in general very tedious, and requires thirty to one hundred sittings, at each of which pain should be excited in the paralyzed muscles. The currents employed should be rapid and intense, and not be continued longer than ten minutes, otherwise the nerves themselves will be liable to be injured by them.

In chorea, M. Briquet remarks that induced currents, passed through the muscles, act but temporarily, but if applied merely to the integument, they occasion rapid and marked diminution of the movements, and frequently effect a prompt removal of the malady. He Faradizes the skin every day or every other day, for five or six minutes, along the entire length of the affected limbs, persevering with the treatment for several months, when necessary.

In amenorrhœa, Faradization proves successful only after the health has otherwise been reëstablished. To and fro currents should be passed between the sacrum and pubes, beginning several days before the period. In cases permitting it, an insulated conductor may be carried up to the womb, and the electricity be passed through it from the lower part of the abdomen.

To produce contractions of the womb and expulsion of its clots in post partem hæmorrhage and in dysmenorrhœa, or to cause more rapid labor in placenta prævia, after due dilatation of the os, Faradization may be employed as an auxiliary to other means, in deference to the success attributed to its use by some few authors of merit. The mode of its application is the same as for amenorrhœa.

It is in hysteria particularly, more than in any other disease, that the to and fro currents prove most successful. In its convulsions, paralysis, tetanus, aphonia, and all its thousand and one anomalous sensations, their employment frequently acts in a surprising manner; the dread alone of the more powerful shocks having sufficient influence upon the mind to control, and prevent their recurrence.

The secretion of milk, when suspended or delayed, has occasionally been reproduced in a few hours by the application of the sponge electrodes, and the passage of moderate to and fro currents through the glands for ten or fifteen minutes. It should be repeated daily until the return is fully established.

In neuralgia, *powerful* direct currents (extra currents) should be *passed along the affected* nerve, through moist conductors, for a few minutes only, and be repeated each time of the return of the pain. The intervals will be found to become longer and longer, and the sensibility to decrease at each renewal of the attack, until it entirely ceases. If electro-puncture be preferred, as strongly advocated by many, weak currents must be employed, and but for a few seconds only.

In bronchocele, electrical excitation renders the thyroid gland more susceptible to the power of iodine or other absorbents.

In chronic rheumatism, direct currents give much relief and promote the absorption of effusions. In cases of rigidity, as that of crick in the neck, the to and fro currents, applied to the healthy antagonistic muscles, by causing their contraction, act powerfully on the diseased ones, subduing their excitement and irritability in the same manner as the exercise of the opponent muscles in ordinary cramps. Dr. Christophers passes the current down the spine, and through the affected part daily for half an hour or longer, and speaks of a case of three years standing that was thus greatly benefitted by it.

In hydrocele, electro-puncture by exciting the serous membrane to absorption, frequently proves successful, even in obstinate cases, in removing the effusion. The needles should be inserted deeply into the fluid from opposite sides, and to and fro currents be gently passed through them for fifteen minutes, increasing their intensity until the pain is complained of; the application may be repeated several times if necessary.

In deficiency of semen, with loss of desire or imperfect erection, I have found the to and fro currents of much benefit, in one case a single application producing a return of power. They should be passed through the testicles, and along the erector muscles from the ischium to the dorsum of the penis, employing the sponge electrodes daily, for fifteen minutes.

In irritable states of the bowels accompanied by slimy stools and alternate constipation and diarrhœa, to and fro currents applied to the colon from the spine, with moist electrodes, has been found of much service.

In poisoning by opium, Faradization is the most efficient means we possess of sustaining life during the continuance of the narcotic effects of the drug upon the brain; in which time the stomach pump and stimuli will not of course be neglected. Dr. Herepath's experience on this subject is worthy of attention; he found, after numerous trials, that when the direct currents only were employed, the positive electrode being placed upon the mucous membrane of the mouth, and the negative just below the ensiform cartilage, that the respiratory movements were carried on with considerable more regularity and ease than by any other method; but that when the conductor was shifted from the cheek to the tongue, spasm of the glottis was produced and asphyxia threatened. In arrest of the heart's action from chloroform, direct currents should be passed through sponge electrodes from the nape of the neck to the ensiform cartilage, placing the positive to the former. But if to and fro currents only are available, the shocks should be passed from side to side, placing one conductor over the cardiac region.

In both cases the finger should be kept pressed between the ribs, and when the heart or diaphragm is noticed to contract, the currents should be momentarily suspended.

By the terms "sponge electrodes," "moist electrodes," "moist conductors" and "moist sponges," are intended Duchenne's cylinder conductors, containing sponges wet with salt and water, and pressed firmly to the skin during electrization.

In conclusion I would remark, that for the successful employment of Faradization, great patience and perseverance is required, and the conjunction of other remedial agents should in nowise be neglected.—WILLIAM E. BOWMAN, M.D., Editor of *Canada Lancet.*

Editor's Table.

Medical Teaching in Cincinnati.—Regular clinical lectures are in progress at the Commercial Hospital in this city, students having already commenced assembling in anticipation of the regular didactic lectures of the winter. There have been some changes in the arrangement of the staff recently at the Hospital. Dr. John Davis has been transferred from the medical to the surgical wards, in place of Dr. Clendenin, in the army; and the vacancy thus created is filled by the appointment of Dr. John A. Murphy.

Army Orders.—Owing to ill health, Surgeon W. H. Church, U.S.V., was some weeks ago granted a furlough of thirty days, with permission to resign. Since that time Surgeon Wm. S. King, U.S.A., has been assigned to duty as Medical Director of this Department. He has already reported to Major-General Burnside, and is regularly installed in the regular duties of his office in this city. Surgeon Carpenter, U.S.V., continues his relation to this Department of Assistant Medical Director and Superintendent of Hospitals.

The Atlantic Monthly.—The eleventh volume of this sterling literary monthly, comprising January to July, 1863, is now bound up and ready for sale. It seems but a day that the first number of this magazine made its appearance. We doubtless had the same view as others, that it was an experiment in the literary world, and doubtless a dangerous one. The November number for 1863 is before us, and one more issue will complete its sixth year, or twelfth volume of publication. In that time some of the best American writers have contributed to its pages some of the most carefully elaborated essays, sketches and novelettes. Hon. Charles Sumner, John G. Whittier, Emerson, Holmes, Longfellow, Agassiz, are amongst the list of contributors. What more can we say? The publishers are Ticknor & Fields, Boston. Terms $3.00 per annum.

"*The Dinner Hour.*"—The following is taken from the *American Medical Times.* Many a tired doctor will appreciate the point made by the writer:

What is his Dinner Hour.—SIR: The following extract from a weekly religious paper is so truthful and suggestive that I beg you to insert it in the *American Medical Times.* It is rare to find a layman who so thoroughly understands the little annoyances to which medical men are subjected:

—What question is oftenest asked of any in life? "What's his dinner-hour?" Men may indeed say: "How d'ye do?" But that is a salutation; half the time we do not care whether it is answered or not. This is a question to which we expect an answer: "Is Mr. Blank in?" "No."—"Is Dr. Good at home?" "No."—"What's his dinner hour?"

Now, my friend, what is the motive for asking this question? Do you expect to dine with him? Oh, no—you only want to see him. If the servant is green enough, he will tell you his dinner hour; and so when the weary man comes home from his business or his round of practice, perhaps hurrying lest he should be late, his dinner on the table, wife and children waiting, there you lie in wait like a spider for your victim. "Just a moment, I only want five minutes' talk with you." Who ever finished a talk in five minutes? It grows to ten, he rises, another five, the family have begun their dinner, or sit waiting and indignant. What is a dinner after it has stood on the table fifteen minutes?

"Just one minute more, Doctor." If a man says one minute, always multiply it by ten. At last he gets rid of you, and he is a saint if he does not follow you with a very left-handed blessing.

"Ah!" you say, "what a stir, merely because a man's dinner is put off, just once." Yes, that's it, "just once." Why, friend, remember that what you do to-day some one else will do to-morrow, and so it becomes a thing of daily occurrence. It is no small thing to spoil a man's dinner every day, to trouble his temper; it is really a matter of health and of principle; for when a man has worked hard he needs repose, and digestion is better with a quiet mind.

And what did you want? "Oh, his help about a situation for my son," or his opinion about a certain investment; or, if he be a physician, a professional opinion? Why not go, then, to his office at the proper time? "Oh, he is so busy then, I always have to wait." So then the whole thing resolves itself into selfishness: you want a favor, and in addition, though you could see him at a time he fixes, you prefer to sacrifice his convenience to your own, and so you ask: "What's his dinner hour?"

"But I expect to pay him." My friend, does money pay for such annoyances, and do you give any extra compensation for loss of temper and much vexation? I never heard of it. "But my time is valuable." It may be; but a man who is really busy, and values his time and is systematic, will appreciate the convenience of others, and not trespass on their rights. Busy! what were you doing the next morning, when he was ready to see you at his office? I saw you lounge for half an hour and smoke a cigar at your leisure. You were not going to have your comfort disturbed, and you spent another half hour later, in very unnecessary gossip with Mr. B. at his office: I saw you; but you were in a furious hurry soon after, and all for want of those two half hours.

Oh! for the Law of Consideration. If your business be for his advantage, he has a right to choose his own time or reject it; if you want him to do you a favor, you certainly are bound to consult his convenience. What is the Golden Rule? Answering that, your next question will not be: "What's his dinner hour?"

Courtesies to the Medical Staff of the Russian Squadron in the New York Harbor.—As is well known to the public at large, a squadron of Russian vessels have been lying off New York harbor, and its officers and men have been the recipients of very cordial manifestations of regard from the citizens of this country at large, as particularly from New York City. Amongst these demonstrations we observe that a deputation from the New York Academy of Medicine made a visit to the medical officers of the squadron. Drs. Buck, Post, and other eminent New York physicians, constituted the deputation. Dr. Buck made a brief address in French, which was replied to in the same language by one of the staff. The greetings on both sides appear to have been mutually characteristic of the *bon homme* of medical men, when professional cares and harness are for the time laid aside.

Godey's Lady's Book.—The publishers of this well known lady's magazine have placed us under obligation by regularly sending us the Lady's Book. We have often spoken of it in this journal, and can only say that of its kind it has no superior in this country. As a fashion book, and guide to the mysteries of kitchen and general domestic lore, it is unrivalled. Its music, engravings, designs for cottages and the like are all features, and each of itself would amply repay the cost. Price $3.00, or two copies for $5.00; three copies for $6.00. Address L. A. Godey, Philadelphia.

Medical Department of the University of Nashville.—Previous to the outbreak of the rebellion, Nashville was rapidly assuming to be the great medical centre of the Mississippi Valley. And the medical classes at its chief medical school, with a Faculty embracing such men as Eve and Bowling, already numbered with the proud lists of Philadelphia schools. The rebellion brought destruction to this interest as it has to many others of the South. We learn, however, that it is proposed to resume medical teaching in that city with the present month. We trust its palmy days of usefulness will speedily return, under the energetic management of the veteran Bowling.

Annual Report of the Directors of City Infirmary, etc., of Cincinnati. The report of the Director of the City Infirmary of the city of Cincinnati for the year ending March 1st, 1863, is before us, and although somewhat late, we take occasion to make some brief notice of it. The Infirmary operations for a city embracing a population of nearly 200,000, becomes necessarily a matter of important consideration. Thus the gross amount in full of expenditures for the fiscal year is given as $88,634.29. This is the amount either directly or indirectly expended for the actual relief of the poor for the year. Heavy as this amount seems at first glance, it will perhaps be a matter of surprise to many, that this is actually nearly $6000 less than the amount paid out for the previous financial year ending March 1, 1862. Thus we find—

Indoor relief was granted in 1862 to	2,324	applicants.
Outdoor relief was granted in 1862 to	21,004	"
Total for the year 1862	23,328	"
Indoor relief was granted in 1863 to	1,587	applicants.
Outdoor relief was granted in 1863 to	12,448	"
Total for the year 1863	14,035	"

Showing a decrease of applications granted the last year of 9,139. "The employment of great numbers of hands, particularly of females, on government work, and the increased circulation of money, are undoubtedly the reasons for this favorable result," is the explanation given for this improved condition, thus exhibited as existing amongst the poor of this city.

Soup House.—One of the means established under the patronage of the City Infirmary, for relief to the poor, is the Soup House, which has been in operation more than two years, at first as a private charity solely. It is evidently both a matter of economy and benefit to the poor. During the past year 1089 families were supplied with good, wholesome food at an expense of $7.521, 89, or about 1·6 cent per ration.

The entire Infirmary operations embrace relief in food, groceries, medicines and physicians' attendance to the poor, at the homes or out-door relief, through regular Ward overseers ; when necessary, relief and care in the Commercial Hospital ; and for the permanent poor, like relief and care in the City Infirmary.

During the past year 1,003 patients (including children born) were under treatment in the Commercial Hospital.

There were during the year 442 inmates of the City Infirmary, of which many are indigent from various forms of chronic disease.

The Commercial Hospital, as most of our readers know, although a department of the City Infirmary, and maintained by the city, is nevertheless under a distinct Board of Trustees, the Mayor of the city and the oldest member of the Board of Directors of the City Infirmary being *ex officio* members. The most liberal provisions are made for medical and surgical attendance to the Commercial Hospital, consisting of a medical staff of six physicians, four surgeons, two obstetricians, two in the department of women and children, two oculists, one pathologist, and two resident physicians. Clinical lectures are given regularly during the entire time of the attendance of medical students in the city, in such manner as to coöperate with the regular didactic teaching of the schools.

Syphiline.—Dr. Samuel W. Francis, in a communication to the *Philadelphia Reporter*, proposes the use of the term *syphiline* to express the idea embraced in the phrase "the syphilitic poison," "the virus of pox" and the like,—*syphiline*, the active principle of syphilis. We like the suggestion.

Lindsay & Blakiston's Catalogue.—This old publishing house have issued a full catalogue of their works, which will be found interesting for reference to all wishing medical books. We make no farther comment, as it is included in the advertising department of the *Lancet and Observer* for this month.

Vaccine Virus.—Physicians will be glad to know where a reliable article of vaccine can always be procured. Mr. Schmidt, 633 Main St., keeps a supply of lymph in tubes on hand, each tube containing enough to vaccinate eight or ten cases. See his card in our advertising department.

Electro-Galvanism as a Medical Agent.—Elsewhere in t number will be found a very carefully prepared article, whic from the *Canada Lancet*, on Faradization. It will well rep reading. Electro-galvanism, like many other agents, has be ed to pass into the hands of quacks, and hence a dispositi part of the Regular Profession to overlook the important a to be derived from it. At the last meeting of the Ohio Stat Society, Dr. Gans, of this city, read an interesting paper on of electro-galvanism in obstetric practice, especially in ato tions of the uterus, whether before or after the completion We have recently had some personal experience that seems v factory. It will be found detailed in the Proceedings of the of Medicine.

New Publications.—It is announced that Dr. Hodge, so m Professor of Obstetrics in the University of Pennsylvan press a new work on obstetrics. It is to be a fine quarto v lustrated with very many lithographic plates prepared fron photographic pictures, together with numerous wood-cuts. tions of well known books are also announced as ready or issued. Amongst these we notice "Dalton's Physiology," Synopsis of Materia Medica," "Parrish's Pharmacy," Formulary," "Wharton Jones's Ophthalmic Medicine and

Ohio State Medical Society.—The committee of publica met with unexpected disappointments in the issue of the Tr of the Ohio State Medical Society, which have delayed th tion far beyond what was hoped and expected. A serious a Dr. Dalton, delayed the transmission of his paper for sever Notwithstanding these troubles the volume will doubtless re bers very soon after the issue of the present number of the *Observer.*

Harper's Monthly Magazine.—The November number o closes up another year. Our readers who appreciate this ve tive magazine will do well to bear in mind the time for ren subscription. Every number is profuse in illustrations. numbers have illustrated articles on the war of 1812 by J. B Harper's Monthly is one of the established institutions of th New York: Harper & Bros. Cincinnati: Robt. Clarke & C 25 cents each number, or $3.00 a year.

Pancoast's Styptic.—As several eminent army authorities have pronounced this styptic as even preferable to the persulphate of iron, we give the formula for its preparation : ℞ Carbonate of potash, ʒj. ; castile soap, ʒij. ; alcohol, ℥iv. Mix.

The advantage of this preparation, as claimed, over the persulphate is that it leaves the stump in a healthy condition, not producing that thick incrustation so objectionable in the iron.

Pennsylvania Hospital.—We notice that Dr. Geo. W. Norris, for many years one of the surgical staff of this hospital, has resigned his position and is succeeded by Dr. William Hunt.

Surgeons in the Libey Prison.—The following is a list of Union Surgeons confined in Libey Prison :

W. V. Houston, 122d Ohio, captured June 15th : W. F. McCurdy, 87th Pennsylvania, June 15th ; Allston W. Whitney, 13th Mass., June 20th ; W. A. Rodgers, 3d Tennessee, June 19th ; Wm. Spencer, 73d Indiana, April 30th ; J. L. Morgan, 10th Mass., May 13th ; C. E. Goldsborough, 5th Maryland, June 15th ; H. L. Pierce, 5th Maryland, June 15th ; Lewis Applegate, 102d New York, July 2d ; T. C. Smith, 116th Ohio, June 15th ; A. A. Mann, 1st Rhode Island Cavalry, June 18th ; R. P. McCandless, Ohio, June 15th ; A. S. Looker, 5th Illinois Cavalry, May 20th ; C. T. Simpers, 6th Ind., June 15th ; F. M. Patten, 12th Virginia, June 15th ; O. Nellis, 2d Virginia Cavalry, July 19th ; W. B. Myers, United States steamship Georgia, May 14th ; W. F. Bowler, 12th Pennsylvania Cavalry, June 15th : J. L. Brown, 116th Pennsylvania, June 15th ; —— Ketchum, 83d New York, June 20th ; D. B. Wren, 75th Ohio, June 20th.

Death of Dr. George Hayward.—While the meeting of the Councillors of the Massachusetts Medical Society was in session yesterday, October 7th, Dr. John Jeffries announced the sudden decease, within an hour, of Dr. George Hayward, of this city, by apoplexy. The abruptness of this announcement produced a profound impression upon the gentlemen present, many of whom were among Dr. Hayward's old friends and associates. A committee was at once appointed to recommend some action on the part of the Councillors in view of this sad event. After consultation, the committee reported as follows :

"The committee appointed to consider what order should be taken in relation to the announcement just made by Dr. Jeffries of the sudden death, since the opening of this meeting, of Dr. George Hayward, former President of this Society, and for a long series of years an active and efficient member, recommend that a committee be appointed to adopt such measures as may, on consultation with Dr. James Jackson, Dr. Jacob Bigelow, Dr. John Ware and the officers of this

Society, and such others as they may please to consult, seem appropriate to this sad occasion."

The report of the committee was accepted, and its suggestions unanimously adopted. Drs. Dalton, Jeffries and J. Mason Warren were chosen a committee to act in accordance with its provisions.—*Boston Med. and Surg. Journal.*

Murders by the Insane.—Two criminals, accused of murder, have been, during the past week, acquitted at the Central Criminal Court on the ground of insanity. One, an elderly man, named Thomas Lidbetter, killed his wife and his imbecile son by cutting their throats. When taken, Lidbetter offered no resistance. On being formally charged, he said he "knew all about it," but that he did not know what he was doing at the time. Evidence was given that he had latterly become taciturn, eccentric, and irritable. Mr. Evan B. Jones, Surgeon, of Hanover Street, Hanover Square, said that he had known the accused for some years, that he had attended his wife when she gave birth to the imbecile child. The prisoner's conduct was most considerate and affectionate at that period; but he was always a strange, odd man, peculiar in his manner, taciturn and incommunicative. Originally he appeared to have been feeble-minded, and, after injuries to the head, received in 1856 and 1859, his perceptive faculties became less acute, and his eccentricities more strange. Mr. Gibson, Surgeon to Newgate, on the contrary, deposed that the prisoner had been under his care for a week, and in his opinion was now in a sound state of mind.

Lord Chief Baron Pollock very naturally expressed his surprise that no medical man had been called on the part of the prosecution, to speak to the prisoner's state of mind at the time of the alleged murder, and on Mr. Metcalfe, the prosecuting barrister, proceeding to cross-examine Mr. Gibson as to the effects of intoxication on an enfeebled intellect, his Lordship interrupted the examination by saying, that "An inquiry involving the life or death of the prisoner was not to be made the sport of a cross-examination as if it were an everyday matter."

We are heartily glad that our judges are becoming more alive to the extreme danger of eliciting medical opinions on such difficult matters as criminal insanity by the process of cross-examination, a method which not only in the large majority of cases fails to extract the real opinion of the scientific witness, but in no small proportion leads him on to expressions or statements which to bystanders bear an entirely different meaning from that he intends. This result may be a triumph of forensic skill, but it is fatal to justice no less than to scientific truth.

The other case was one in which the insanity seems to have been dependent on pregnancy. The prisoner was a married woman, twenty-one years of age, and four months advanced in pregnancy. She had been twice enciente before, and during those periods had suffered from great despondency, and had always exhibited a peculiar horror of knives and razors. She murdered her child by cutting its throat, and then attempted her own life, first by wounding her throat, and then by throwing herself out of the window. She also took laudanum, which was detected in some fluid she vomited. This at least appears to have been an instance where the catastrophe might have been foreseen and prevented. Yet, probably, any physician who in her previous pregnancies had recommended restraint would have had some difficulty in proving to a jury its necessity, if proceedings had been taken against him for wrongly signing the certificate of lunacy.—*Medical Times and Gazette.*

Suicide in Bavaria.—M. Majee, in his work on this subject, states, among other motives for suicide, that the price of food has great influence upon it, especially during the last few years since food has so greatly increased in price.

Suicides increase in proportion to the increase of the population, but in times of great political agitation the number of suicides diminishes, increasing again when quiet and order are reëstablished, doubtless the result of hopes deceived.

Suicide, he remarks, is also more frequent in towns than in the country, but that may be accounted for by the greater amount of population in the former.

Sex exercises an influence on this malady, as men are attacked in greater numbers than women, the proportion being four to one ; now as this difference relative to sex is not found in mental affections, although in the number of crimes, suicide can be but rarely attributed to a derangement of the intellectual faculties.

Violent deaths by suicide, by assassination, or by accident, taken as a whole, are three times more frequent among men than among women, and suicides by women are of more constant occurrence in towns than in the country. The greatest number of people commit suicide when arrived at manhood. In Bavaria the maximum occur between the ages of forty and fifty ; under forty years of age and over sixty, there are more women in proportion ; whilst between forty and sixty, there are more men who commit this crime.

In a given number of people, suicide is found to be three times more general among the Protestants than the Catholics, and about a third more frequent than among the Jews. In mixed provinces, the frequency is in an inverse ratio to the number of the Catholic inhabitants. By way of compensation, crimes are more universal among these latter.

In agricultural populations this crime is nearly four times as rare as it is in industrial populations, and in years of dearness the proportion seems to increase in the towns more than in the country. Suicide, at least in Bavaria, is rather more frequent among married people ; crime, on the contrary, is always more constantly committed by the unmarried. About half of the number who commit suicide enjoy good health ; *intellectual derangement has been satisfactorily found to exist in about a fifth, and bodily affections in about a fourth.*

The greater number of patients were little favored by family or fortune; but in about two-fifths their position and circumstances left nothing to be desired. Suicides from mental causes are more common among Catholics than Protestants.

Death by hanging is the method selected by half those who commit suicide in Bavaria and Germany; then, drowning by about a fourth. Ladies generally choose this latter method.

The greatest number of suicidal deaths occur in June, July and August; the smaller number in the cold months of November, December and January.

We see again in these facts how much the crime of suicide is influenced by national customs and modes of life. The Bavarians follow the English in that hanging is with them the most popular form of self-destruction.—*Social Science Review.*

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Army Medical Intelligence.

Surgeon Henry Janes, U.S.V., has been ordered to remove all the sick and wounded, able to travel, from the General Hospitals at Gettysburg, Penn., for Baltimore, Md., between the 20th ult. and 5th inst. Sick and wounded who are not fit to be removed, will be placed in charge of competent medical officers in the town of Gettysburg. Having performed this duty, Surgeon Janes will report in person to the Surgeon-General.

Surgeon William S. King, U.S.A., has been relieved from duty as Medical Director, Department of the Susquehanna, and ordered to proceed to Lexington, Ky., and report in person to Major-General Burnside, commanding Department of the Ohio, for duty as Medical Director of that Department.

In accordance with the findings of a military commission, convened by virtue of Special Orders No. 386, Headquarters District of Memphis, and by direction of the President, Assistant-Surgeon W. S. Bell, 43d Ohio Vols., has been dismissed the service of the United States for absence without leave.

So much of Special Orders No. 408, September 17, 1863, from this Office, as directed Assistant-Surgeon W. C. Daniels, U.S.V., to report in person without delay to Major-General Grant, U.S.V., commanding Department of the Tennessee, is hereby revoked, and Surgeon Daniels will report at once to Major-General Burnside, U.S.V., commanding Department of the Ohio, for duty.

So much of Special Orders No. 294, July 3, 1863, as directed Surgeon Charles McCormick, U.S.A., to report in person to Brigadier-General Kelly, U.S.V., commanding Department of Western Virginia, for duty as Medical Director, has been revoked, and Surgeon McCormick will proceed without delay to Wilmington, Del., and relieve Surgeon John Campbell, U.S.A., as a member of the Retiring Board, convened by Special Orders No. 307, July 11, 1863, now in session at that place.

Surgeon Campbell, on being relieved, to proceed to Headquarters Department of the Susquehanna, and report to Major-General Couch commanding for duty as Medical Director.

Lieutenant-Colonel N. S. Townsend, U.S.A., now on leave of absence, to report at the expiration of his leave to Assistant Surgeon-General R. C. Wood, at St. Louis, for assignment.

Surgeon W. C. Otterson, U.S.V., has been ordered to report to the Assistant Surgeon-General, at St. Louis, Mo., for hospital duty, as soon as his health will permit.

Surgeon Frederick Seymour, U.S.V., has been ordered to repair to Nashville, Tenn., and settle his accounts and property returns.

Assistant Surgeons Gerhard Saal, H. L. W. Burritt, and Edwin Freeman, U.S.V., have been ordered to report to Surgeon J. E. McDonald, U.S.V., Medical Director 9th Army Corps, Department of the Ohio.

Surgeon S. S. Schultz, U.S.V., has been transferred from Covington, Ky., to Madison, Ind.

Editorial Abstracts and Selections.

PRACTICAL MEDICINE.

1. *Veratrum Viride as a Means of Diagnosis in Diseases of the Chest.*—Professor Samuel R. Percy, M.D., extols (*Amer. Med. Times*, July 11, 1863,) the value of the veratrum viride as a means of diagnosis in diseases of the chest.

He states that since 1856 he has "been in the habit of preparing every patient, whose heart or lungs I have wished to examine, with small and proper doses of veratrum viride, and by this means I have been enabled to arrive at a clear and certain diagnosis of cases of incipient phthisis, pleuritis, pneumonia, diseases of the heart, etc., that I could not clearly diagnose without the previous preparation of the patient with this remedy, owing to functional disturbances or other exciting causes. There are many persons who are examined for these diseases where it is almost impossible to arrive at any correct diagnosis in the early stages of disease, at which time only treatment can be expected to be of much avail, owing to even slight functional disturbances, which completely mask or render obscure the signs that without the disturbing causes would be readily recognized. Now veratrum viride quiets these functional disturbances, lessens the rapidity of the circulation, tranquilizes the respiration, and thus so moderates these functions that the mind can readily define and arrange the sounds that are communicated to the ear. I give you this new means of diagnosis as the results of my own investigations. I am not aware that it has ever been practised, except by those to whom I have communicated it. I need not impress upon you its vast importance, for by means of this practice you may always know what you are treating, and you will find that that is no slight gain in your ability to inform your patient of what he may expect from your treatment. This new means of diagnosis will be of inestimable value to the Life Insurance Companies in all cases of doubtful diseases of the chest."—*Amer. Jour. Med. Sciences.*

2. *Bromine in Hospital Gangrene.*—Dr. M. Goldsmith, Surgeon U.S.V., gives (*Amer. Medical Times*, Sept. 12, 1863) the following consolidated statement of the cases of hospital gangrene, of which he has gathered the records from various U. S. military hospitals. Four of these cases terminated fatally. "One of these cases," he states, "is reported as having been brought into the hospital moribund. Two were cases in which the disease attacked the track of ball wounds passing through the thigh, and in which the bromine was applied to the external parts, the apertures of entrance and exit only, and therefore did not touch the major part of the gangrenous surfaces. One, in which, with a wound like those just mentioned, the cellular tissue of the limb from the trochanter major to the malleoli was destroyed by cellulitis. It will also be noticed that in four cases the bromine is reported to have failed in arresting the gangrene. In each of these the bromine had been applied, I have reason to believe, much more frequently than is compatible with the establishment of granulation—for bromine is a caustic agent. In one case granulation occurred two days after the abandonment of the bromine, and the use of a weak solution of creosote; in two cases after the use of a solution of the persulphate of iron, and in one case after the use of a cow-dung poultice.

Consolidated Statement of Cases of Hospital Gangrene treated in Louisville, Nashville, Murfreesborough, and New Albany.

TREATED WITH—	Whole number.	Recovered.	Died.	Amputations.	Average duration of treatment.		Percentage of deaths.
					Days.	Hours.	
Bromine in any way	152	148	4	0	5	14	2 63-100
Bromine pure exclusively	27	25	2	0	2	22$\frac{2}{3}$	
Bromine in solution exclusively	86	84	2	0	6	11$\frac{1}{3}$	
Bromine pure after the solution failed	8	8	0	0	12	18	
Bromine after nitric acid failed	23	22	0	1	3	16$\frac{1}{3}$	
Bromine after other remedies failed	8	8	0	0	3	4	
Nitric acid exclusively	13	5	8	0	3	14 2-5	61 54-100
Other remedies exclusively	13	7	5	1	7	13 5-7	38 47-100
Other remedies after bromine had failed	4	4	0	0			

"I beg here to call the attention of such of your readers as may be interested in the matter to the fact, that almost all the surgeons who have adopted the bromine treatment of hospital gangrene rely now upon the use of the pure undiluted agent, the various solutions having been found less prompt in their effects, and, for the ends in view, less reliable."

Dr. Post, in a discussion before the New York Academy of Medicine, (May 20th, 1863,) made the following remarks on the use of bromine in hospital gangrene, as reported in *American Med. Times*, Sept. 12. "The local treatment seemed to have played the most important part in arresting the progress of the disease. The remedy used more than any other was one introduced by Dr. Middleton Goldsmith, Assistant Med. Director. I refer to bromine, or some of its preparations. It is principally with reference to the action of bromine as a local application that I have risen to speak. The preparations of bromine that have been used have been either the pure bromine, a dark red liquid with a pungent odor, or more frequently a preparation analogous to Lugol's solution of iodine—160 grains of the bromide of potassium are dissolved in 4 oz. of water, this solution is placed in a bottle, and an ounce of bromine is added, making a solution of the bromuretted bromide of potassium. In some cases there is a simple residuum, owing, doubtless, to some existing impurity in one or other of the ingredients. It is a reddish colored fluid, from which the fumes of bromine are given off. The mode of making the application has varied somewhat with different surgeons of the hospitals I have visited, but those who used it with the most care and success used it in the manner which I will indicate. In the first place, after the sloughing process has been fully established, when the tissues involved have become positively putrid, and there is a disposition to form a separation between sound and healthy parts, all the dead portions are carefully detached by means of a scissors, after which the denuded part is thoroughly washed with a syringe and lukewarm water; after this the comp. sol. of bromine is brought in contact with every portion of the sore either by means of a camel's hair brush, or a small syringe. If there be sinuses, the fluid is injected into them, and the same thing is done with the undermined integument. In case of a gunshot wound through the limb, when the syringe can not easily be used, a small strip of old linen is attached to the eye of a probe after having been dipped in the solution, and drawn through the wound. This linen is then left in until the next day's dressing.

"The first effect of the bromine was very remarkable in removing all offensive odor—the fetor would be removed in a very remarkable manner, so much so that you had to apply your nose close to the surface of the sore to detect any odor whatever. The next effect was to coagulate the albumen and leave the part as if varnished—there was no appearance of the putrefaction whatever. The patients complained of severe pain at the time of the application, but I have reason to believe that such complaints were much exaggerated. The dressing applied after the application of the bromine varied in different cases. In most cases the surgeons were in the habit of applying yeast poultices, and they also used, as a substitute for this, a fermenting substance made by adding carbonate of soda and tartaric acid to a poultice. I suggested to them the propriety of substituting the bicarb. potash for the cream of tartar, on the ground that the gas would in that event be more slowly evolved. In other cases the liq. sod. chlorinata was used; in fact, numerous applications of the sort were made according to the peculiar notion of the surgeon-in-charge.

"I found that there were some of the surgeons in Nashville who were skeptical with regard to the advantages of bromine as a local application, they maintaining they had better success from the use of nitric acid; but I observed that some of these gentlemen had applied it in rather a careless way, while they had used the nitric acid more thoroughly and with more care. There was one gentleman, particularly, who seemed very skeptical. I informed him, that he had not applied it as carefully and as thoroughly as the other surgeons, and therefore he erred in a good effect. I also suggested, that if he would use it in another way, he would have like success. Since I have returned to the city, I have received a letter from that gentleman, and he tells me that he has taken my advice with reference to its mode of application, and has been abundantly successful.

"With regard to the constitutional treatment, I believe there can be very little discrepancy of opinion concerning the use of tonics, stimulants, and good food in this disease.

"I will observe, that those gentlemen who have used bromine so largely look upon it as an antidote to the poison, whatever it is, of hospital gangrene, consequently they do not advocate the free circulation of fresh air as they otherwise would.

"I observed that bromine was used for disinfecting the atmosphere of the ward, by pouring it into saucers, or by carrying an open-mouthed bottle containing the liquor through the ward. This was done five minutes at a time three times a day, and the fact that the gangrene did not spread where the bromine was used, seems strong proof of the existence of the property claimed for it.

"The frequency of its application varied with different surgeons from once to twice or three times in twenty-four hours. When the surface of the granulations became visible, the solution was weakened. In the cases that I had the opportunity of seeing, the disease was arrested throughout the great body of the sore within two or three days. In the case of the seton in the back, the disease was not arrested ten days after the application, but I have afterwards understood from Dr. Goldsmith that the disease was finally entirely checked.

"I have come to the conclusion, from what I have seen, that the application in the treatment of hospital gangrene, is very highly conducive to the health of the patient, and I think that it will prevent the spread of the disease.

"There is one important fact connected with bromine, which I think well worth relating. I saw, at Louisville, a case of hospital gangrene of the leg, where, in the course of the disease, the posterior tibial artery became involved, and hæmorrhage occurred. The interesting feature in the case was, that the surgeon-in-charge tied the artery at the bottom of the sloughing surface, and applied the bromine immediately over it. I saw that case a little less than a week after the application occurred, and the case was doing remarkably well.

The ligature had separated the day before I saw it, and at that time the sore was in a healthy state of granulation. I am unable to say whether any further hæmorrhage occurred. Dr. Goldsmith informed me, that the case was the fourth one where such a result was obtained from the application of bromine. This is a very remarkable fact, because the general result of tying arteries in the midst of sloughing parts is that hæmorrhage takes place very soon again. If bromine has the power of arresting this sloughing process, it is a fact well worthy of our investigation.

"Dr. Post, in conclusion, alluded to the good effects claimed by the surgeons for bromine in cases of diphtheria and erysipelas. In the 'Park Barracks,' of Louisville, erysipelas broke out with great severity, and the moment that the bromine treatment was introduced the disease ceased to spread. The remedy was used both in fumigation and as a local application. The surgeons were in the habit of moistening lint with the compound solution of bromine, and applying it directly to the part, and covering the whole with oiled silk. Dr. Post saw a number of cases treated in that way, where improvement had taken place in a very short time. He was informed by those gentlemen who had charge of the erysipelatous hospital, that in almost all cases, in from twelve to twenty-four hours after the commencement of the treatment, the erysipelas began to subside. It scarcely, in any case, continued to spread beyond two or three days; generally its spread was checked within from twelve to twenty-four hours."

Dr. William B. Alley reports (*Buffalo Medical Journal*, Sept., 1863,) a severe case of hospital gangrene successfully treated by bromine.

Dr. R. S. Stanford, Surgeon U.S.V., also reports (*Amer. Medical Times*, July 18, 1863,) a case of hospital gangrene successfully treated in Hospital No. 12, Louisville, Ky., by the same article, and expresses great confidence in its efficacy.

"From my own observation," he says, "in the treatment of hospital gangrene, erysipelas, and diphtheria, I am entirely satisfied that all of them are local diseases, and may be cured by the use of bromine properly applied. The foregoing case establishes, as far as any single case can do, the efficacy of pure bromine over the compound solution, the latter having been applied daily for the term of twenty-seven days without arresting the gangrenous process, while the pure bromine arrested it upon the first application. The wound was prepared for the reception of the remedy in the same way, and with no more pains than had been taken upon each application of the solution. The constitutional symptoms subsided within twenty-four hours after the pure bromine had been applied; the gangrenous odor disappeared entirely within the first six hours after the application of the pure remedy. Within twenty-four hours the appetite returned, and has continued good ever since. The skin gradually gave up its dirtyish yellow hue; the urine also gradually returned to the normal color; the pulse dropped down to eighty, and has maintained that number of beats per minute from the second day after the application of the pure remedy up to the present time.

"The patient is now able to walk about the ward, and would do so if he had two legs. The wound has been filled with granulations, and is being skinned over, there only remaining a small portion upon which the skin has not been renewed, and this immediately around the bone.

"If this was the only case I had treated with this remarkable agent, I could not speak in as strong terms as I am now about to do; but I have treated a number of cases that were equally as grave as this one, and with complete success in every instance; and numerous cases in other hospitals have been met, where a like success crowned its proper application. I can say to the profession with unbounded confidence, that we have in bromine an agent which, when properly applied to gangrenous ulcerations, cure them in every instance with more certainty than quinine cures intermittent fever."—*Amer. Jour. Med. Sciences.*

3. *Vaccination of Young Children.*—The following report by Dr. David Murray, on the results of vaccinations at the Maternity Hospital, was read before the Obstetrical Society of Edinburgh: "I have myself vaccinated altogether about twenty-five cases, a few of them being done by others, at my request, out of doors. The following exhibits the respective ages of the patients: Five at 1 day old; six at 2 days; three at 3 days; four at 5 days; four at 6 days; three at 7 days. In every case the vaccination was perfectly successful, and seemed to take very readily—the amount of lymph in some instances being almost imperceptibly small. The vaccine vesicles went through their course successfully in the usual time, and were very complete and well formed. No injurious effects were observable; the children took the breast, and appeared as if nothing unusual had been done to them. No child of even three months could have been less disturbed.

"If dangerous results had been likely to have followed the performance of the operation, I believe that it would have been so in the present instances, as it is well known that many of the children born in the Maternity Hospital are very unfavorably situated, having by no means good constitutions transmitted to them. Though, therefore, the number is comparatively small from which to form an extensive induction, yet I consider that the present results sufficiently entitle us to draw the following conclusions:

"1. That no danger attends vaccination at even the earliest period of existence, and that, therefore, it may be done with perfect impunity.

"2. That the vaccine lymph seems to affect children as readily, if not more so, at that early period, than at a more advanced age.

"That most of the dangers or bad effects which are said to have followed the employment of early vaccination can not fairly be attributed to any constitutional disturbance occasioned by the operation, but must have arisen altogether independent of it."

The following report by Dr. Ritchie was also read: "1. Mrs. F.'s boy, 12 hours after birth—successful. 2. Mrs. C.'s boy, 10 hours after birth—successful. 3. Mrs. M.'s boy, 62 hours after birth—successful. 4. Mrs. B.'s boy, 5 hours after birth—successful. 5. Mrs. B.'s child, 5 days after birth—successful. 6. Mrs. M'K.'s child, 4 days after birth—successful. 7. Mrs. M'L.'s boy, 3 days after birth—unsuccessful."—*Edinburgh Med. Jour.; Amer. Jour. Med. Sciences.*

4. *The Internal Use of Chloroform in Convulsions.*—Dr. Case, of Tremont, Ill., recommends the internal use of chloroform in puerperal and hysterical convulsions, finding it to act better than when inhaled. He gives twenty drops, and repeats it in half an hour. This, however, is a very small dose; probably he intends minims (there are four drops to a minim). A fluid drachm of chloroform is equal in soporific effect to 35 drops or 21 minims of laudanum. Dr. Hartshorne has given it in doses of from 50 to 75 drops every half hour for several hours together. And we are constantly in the habit of prescribing from 80 to 100 drops in colic and delirium tremens, and have never noticed any ill effects from its use in these qualities.—*Canada Lancet.*

SURGICAL.

5. *Lupus successfully treated by Stramonium.*—Dr. John Hastings reports (*The Pacific Med. and Surg. Journal,* May, 1863,) three cases of lupus successfully treated by stramonium. In two of the cases the bruised leaves were made into a poultice, were applied to the ulcerated surface, and afterwards stramonium used; in the third case the latter ointment was alone employed.—*Amer. Jour. Med. Sciences.*

6. *Petroleum in Surgery.*—An assistant-surgeon writing from Gettysburg, says:—"Will you allow me, as one alleviation of the horrors of the battle-field, to call your attention to the use of coal-oil in suppurating wounds? As volunteer assistant I received permission from the surgeons of the first division of the Fifth corps, Gettysburg, to use it in the most offensive cases. By its manifest utility, and the solicitations of the wounded, I was induced to enlarge its use, until I became satisfied that what cold water is to a wound, in its inflamed state, coal-oil is to it in its suppurating state, dispelling flies, expelling vermin, sweetening the wound and promoting healthy granulations. It can be used by any assistants of ordinary judgment, with perfect safety and to the great comfort of the patient. I have seen two patients, whose wounds have been dressed with it, asleep before I was through with the third."—*Am. Druggist's Circular.*

7. *Results of the Operations for the Radical Cure of Congenital Hernia, reported in this Journal, June 4, 1863.*—At the last meeting of the Society for Medical Improvement (Sept. 28th), Dr. Cheever exhibited to the members a boy, 12 years of age, who was operated on for congenital hernia by Wood's method, last April, and who was, to all appearance, cured. It may be remembered that of the three cases reported in the journal, one failed at the outset from ulceration of the sutures on the fifth day; the other two were progressing favorably two months after the operation. Dr. C. gave a brief abstract of

their continued improvement since that time. The first case, operated on by Gerdy's method, was left, with the skin of the scrotum firmly invaginated, the testicle a little enlarged, and the inguinal canal filled with a dense deposit; there was no bulging at the internal ring. The boy had constantly played about since that time, and had never worn any truss since the operation. At the end of six months he was every way as well; there was not the slightest bubonocele, and it seemed very improbable that the great thickening in the inguinal canal would ever give way again.

The second case, operated on by Wood's method, was allowed to sit up three weeks after the operation. The hernia remained up, and there was some induration along the inguinal canal. After he had been up a fortnight, a slight protrusion was noticed at the internal ring. Examination by the finger revealed the external ring reduced in size about one-half, with firm, sharp and defined edges, showing it to be the result of actual approximation of its walls. There was considerable thickening of the scrotal fascia and cellular tissue. He was advised to wear a truss with a weak spring and flat pad, for some weeks. Within a few days after putting on the truss he left it off for several days while moving about, and the hernia did not come down. It has never come down since. He wore the truss at first pretty continuously, then rarely, and for the last month not at all. Being an active boy, he disliked the truss, and shirked putting it on when he could. During the last few weeks he has done heavy work, assisting in putting in coal, etc., without truss, and with no feeling of weakness in the groin. He therefore considers himself well, and certainly seems so. When shown to the Society, the cicatrices of the operation were but faintly visible, the parts somewhat thickened, and not the slightest bubonocele. It is now six months since the operation.

These cases were operated on with silver wire, and Dr. Wood now gives that the preference over silk or hempen sutures. The instrument used was not unlike an aneurism-needle, somewhat sharpened, and with the eye at the point.

Dr. C. also alluded to the excellent monograph on Hernia, recently published by Dr. Wood, in London. This is profusely illustrated; and by this means the author makes clear—what is always so difficult to make out from descriptions—his method of operating for the cure of rupture. Dr. Wood gives the result of his operation in sixty cases. There was but one death, and that from pyæmia. There were 42 cures, or about 70 per cent. of successful cases. Some of these cases were in children, but many in adults. Some of the latter worked as sailors, coal-heavers, dock-laborers, etc., without trusses, one year after the operation. This method has also the advantage of rendering a truss more efficient, even if it does not cure the hernia by the operation itself. For it draws the wall of the canal together, instead of spreading them open by invaginated skin, or by plugs, as other methods of operating do. In his work Dr. Wood has introduced many modifications of his operation, according to circumstances. But the essential principle is the same, viz.: to close the inguinal canal by approximation and inflammatory adhesion of its walls, both the rings being also drawn together; and this certainly seems the most reasonable method of attempting a radical cure.—*Boston Med. and Surg. Journal.*

8. *On an Improved Mode of Using Refrigeration as an Anæsthetic and as a Remedy.*—(By JAMES ARNOTT, M.D.)—It is now, I believe, universally admitted that, by the application of intense cold, pain may be certainly prevented in the numerous operations in which the incision is confined to the skin and the superficial textures; and few will dispute that, in these operations at least, its perfect safety gives it a great advantage over ether or chloroform. But the general opinion is, that it is more troublesome to use than chloroform, and that it is more apt to fail in producing anæsthesia from some oversight or error in the application. This idea has prevented many from employing refrigeration, except in cases where the patients have objected to chloroform, or where there was more than the ordinary risk from its use. In hospital practice, the longer time occupied in effecting congelation has made chloroform to be preferred in almost every case. In consequence of this, many deaths have occurred from the administration of the latter in the most trivial operations—in the extraction of a toe-nail, the opening of an abscess, or the cutting off a wart.

There is nothing singular in this objection, arising from the supposed difficulty or trouble in the use of intense cold. Some of our most valuable remedies have only become generally adopted when the mode of administering them has been simplified. Artificial respiration, galvanism, and several measures resorted to in the treatment of stricture and stone, may be adduced as examples. But the most striking instance of this is found in a therapeutical agent more nearly connected with our present subject. Although sulphuric ether, when properly employed, is not inferior as an anæsthetic to chloroform, the greater trouble attending its administration would have probably very much lessened the use of etherization, had no easier mode of effecting it been discovered. Chloroform is more dangerous than ether, and has on this account been banished from some of the principal hospitals in North America and France, yet so much valued by the great majority of surgeons is its greater ease of administration, that the honor of discovering this means of facilitating anæsthesia has been almost as keenly contested as that of the great discovery of etherizaization itself.

Congelation has hitherto been generally produced by placing the freezing materials on the part to be benumbed. In order to ensure success, care must be taken that the ice shall be well pulverized and rapidly mixed with the salts constituting the frigorific. The mixture must be applied by means of gauze, or some other thin permeable material; and when the part is not in a horizontal position, a gutta-percha cup fitted to it may be required to keep the frigorific in contact with the skin. Now, all this trouble may generally be avoided by the adoption of an expedient similar to that employed in the therapeutical application of extreme heat. It is rarely the case that a burning substance is applied directly to the part; instead of this, an iron, which

has been previously heated in the fire, is use
iron, or a brass, or a copper implement, of a
previously cooled in a freezing mixture, and
accuracy to any accessible part, in whatev
A small, flat, laundry iron, which may be us
will also answer in a great many cases as the
tensive or continued refrigeration is required,
ed in a semifluid mixture of two or three po
be necessary to replace each other, just as tw
quired for cauterization.

When a metallic body of this description
zero of Fahrenheit, it will often arrest the ci
instant it touches it; but more frequently
gently pressed on the part for a few seconds,
ous fresh surface in contact with it while th
pressed.

Another expedient, partly resembling that
ly that hitherto in use, consists of a thin me
or aluminium,) completely filled with the
Florence flash will sometimes answer the sam

I think the above description is sufficien
surgeon, by the adoption of this method, wil
plain of difficulty or trouble in using conge
prevent pain in minor operations, or to preve
of pain, or that arising from incision of the
deeper or severer kind. In the preface to
Years' Operative Surgery in the Provinces
that he "refuses chloroform in the lesser ope
salt can be conveniently applied." By mear
erator almost every part will be accessible.
Messrs. Perrin and Lallamand in their recent
on "Surgical Anæsthesia," that congelatio
stricted to certain operations, will probably,
the process, have no longer any foundation;
lowed to use the words of these writers, "o
où, grace a la réfrigeration, l'anesthese pour
pratique uselle de la chirurgie" (page 651).

It is not, however, in being a safe anæ
value of congelation consists. I am anxiou
prompt and certain antiphlogistic in all a
The extraordinary remedial powers of congel
of chronic rheumatism, which I have related
may be attributed partly to its anæsthetic
virtues, and partly to the peculiar counter-irr
As promptness of action is eminently chara
it would be especially serviceable in many of
painful diseases to which soldiers and sailors
at present cured with so much difficulty as t
for their duties. Amongst these may be re
matory affections of the joints, wounds,

lumbago, and other painful affections, inflammation of various glands, ophthalmia, erysipelas, and other diseases of the skin.

Being convinced, from no little experience, that a short application of intense cold, produced by a frigorific mixture of appropriate strength, constitutes a certain and speedy remedy of every accessible inflammation, as well as a means of preventing pain in operations, without the risk of sudden or (which has been much more frequent) consecutive death attending chloroform, I do not deem that portion of my time misspent which has been employed in devising and describing such a simple and easy mode of making this application as may lead to its general adoption.—*Med. Times and Gazette.*

9. *An Easy Method of Reducing a Dislocated Humerus.* — Dr. Garms describes the following modification of Cooper's procedure. The patient is laid upon the floor, not on his back, but on his belly, some cushions intervening. A towel is attached to the humerus above the elbow, and another, passed round the upper part of the humerus, is given into the hands of the assistant, standing on the side of the dislocated arm. The operator, sitting down on the floor, on the same side, lays hold of the lower towel, and applies the heel of the foot lying nearest the patient to the axilla. He makes extension backwards and downwards, while the assistant draws laterally. The dislocation is thus reduced with surprising facility, the agency of chloroform not being required. The advantage of this modification is that extension backwards may be far more easily executed than when the patient is in the supine position; and this is the direction required in dislocation forwards, which prevails in the great majority of cases. For dislocation backwards, which is very rare, Cooper's procedure is the best.—*Brit. and For. Med.-Chir. Rev.*, July, 1863, from *Archiv. der Heilkunde*, No. 2, 1863.

10. *Management of Patients after Surgical Operations.*—Mr. Paget, in his anniversary address on this subject before the British Medical Association, remarks that, though the preference of immediate union is generally just, it may become an unwise prejudice. "When that mode of treatment is attempted and fails, it may lead to something more than disappointment—it may be very mischievous, for there is no local source of blood-poisoning more effectual than the retention of blood or pus till they decompose behind the edges of a wound unwisely united. The rule, therefore, for the choice of modes of healing may be always in favor of union by the first intention, when there is a reasonable probability that it can be, at least, in good part accomplished; but when there is less than a reasonable probability, to make no attempt at it. The local treatment may be summed up in two words—repose and cleanliness. The cleanliness should, however, include more than it commonly does, such as the use of general or large local baths, the value of which, especially after lithotomy and other perineal and pelvic operations, can not be overstated; and of the frequent *change, not only* of dressings, if there be any, and of bed-*linen, but of beds; and,* during convalescence, the change of rooms

or of one part of the ward for another. As to general treatment, the best plan is to let the patients be as nearly as possible in the ordinary mode of prudent life, to give no medicine of which the need is not expressly indicated, to observe all rules of personal cleanliness, to provide abundant fresh air, and a sufficient or a liberal mixed diet.

"I believe, then, that in our retrospect of the management of patients after surgical operations, we may congratulate ourselves on the increasing simplicity of our practice, founded on the wider recognition of the sufficiency of the natural processes of recovery. And herein surgery may be said to have been a good contribution of that more accurate study of the natural history of disease which is becoming the most pressing want of our time. What will happen if this or that injury or disease be left to itself, or only so managed as the patient's comfort may suggest? The question has been often asked, but rarely answered; yet it must be answered before we can accurately study the value of any medical or surgical remedy. It is the question in therapeutics that should most occupy our minds; for until we have made our standards of what the progress of disease is left alone, we can not judge of our power of controlling or of remedying it."—*British Med. Journ.*, 1862.

MATERIA MEDICA.

11. *Liquid Permanganate of Potash.*—M. Leconte prepares this solution in the following manner: Caustic potash, six drachms; chlorate of potash, five drachms; binoxide of manganese, five drachms. Dissolve the caustic potash and the chlorate in a small quantity of water, and add the manganese; get rid of the water by evaporation, stirring constantly, and calcine the dry to a dark red for an hour in an untinned iron cup; allow to cool, and add a quart of plain water. Then boil for five minutes in a china capsule, and you will obtain a fluid of a slightly purplish tint; decant the solution, and wash the residue with such a quantity of water as to make altogether two quarts. When filtering is thought necessary, the liquid should be passed, not through paper, but through very fine sand. For dressing foul wounds, or for injecting, use one drachm of this solution to from three drachms to five of spring water.—*Lancet; Amer. Jour. Med. Sciences.*

12. *On Inhalation of Nitroglycerine.*—Various experiments have been made by different observers upon the action of nitroglycerine or glonoine upon the animal economy—the nitroglycerine, or its solution in alcohol, being administered by dropping it upon the tongue—the effects which have been noticed being generally acceleration of the pulse, headache and prostration, and in peculiarly susceptible persons, these symptoms greatly aggravated.

These experiments, though somewhat contradictory, are very interesting, both from a chemical and toxological point of view, but do not touch upon one matter, viz.: the effects of the inhalation of the vapor of glonoine—a subject to which considerable interest must attach itself when we consider the rapidity with which the symptoms develop themselves when only a fraction of a drop is placed on the tip of the tongue.

In preparing a quantity of nitroglycerine in 1859, I met with an accident, the result of which exhibits in a very marked and satisfactory manner the toxical properties of this curious substance, and shows the necessity for extreme caution in handling it, especially when mixed with a volatile and inflammable solvent, as alcohol or ether.

The nitroglycerine was prepared by allowing pure glycerine to drop from a pipette with a glass stop-cock, so adjusted as to allow from fifteen to twenty drops to fall in a minute into a mixture of equal volumes of the strongest nitric and sulphuric acids cooled by very cold water.

In repeated experiments I have found that, in spite of the precautions taken to cool the acids, it is impossible to avoid an accident now and then, since, when the action reaches a certain intensity, just as in the oxydation of uric acid or cotton, the experiment ends in an explosion or a violent evolution of nitrous fumes. When such a result occurs in making glonoine, the bystander seldom escapes a severe headache, even though the experiment be conducted in the open air.

After glycerine equal to half the bulk of the mixed acids had been dropped in, the whole was thrown into a large volume of cold water, thoroughly washed, drawn off with a pipette, dissolved in ether, and the ethereal solution evaporated on a water-bath. It was in this part of the preparation that the accident occurred which enables me to speak of the consequences which follow the inhalation of the vapor. The glass dish in which the evaporation was being conducted, by some mishap tipped over, spilling half its contents on the hot copper bath, and in a moment the room was full of nitroglycerine and ether. Although I stood directly over the water-bath to adjust it, and must have inhaled a large volume of the mixed vapor, no instant bad result followed, but in less than fifteen minutes a headache set in, slight at first, but increasing in intensity by degrees, until in an hour and a half it became almost intolerable. It was accompanied by a good deal of faintness and exhaustion, intolerance of light, and a feeling of great general distress and alarm, in addition to the racking pain. Relief was only obtained at length by the inhalation of a large quantity of ether, the insensibility produced by which was followed by broken and disturbed sleep, lasting until the following day, which was marked by weakness, exhaustion and slight headache. These unpleasant symptoms did not finally disappear for three or four days.

It may be remarked that, during all the time that the severe pain and distress lasted, consciousness was never lost for an instant. In Mr. Field's case, (Braithwaite,) two drops of a solution containing only one drop of glonoine to ninety-nine of rectified spirit produced loss of consciousness and other very alarming symptoms of narcotic poisoning.

The effects of glonoine upon different individuals are exceedingly different and contradictory. Two drops of a diluted solution contain-

ing only one drop of nitroglycerine in ninet
alarming symptoms of poisoning in one per
lows two hundred drops of a similar solutio
than a slightly "muddled" feeling in the l
unpleasant feelings from tasting exceedingly
nitroglycerine, such as headache, buzzing in
nervousness and depression, although the ac
seem to be nearly so powerful or so rapid as
of alcoholic solution. Pure nitroglycerin
temperatures—a fact which was accidentally
with a mouth pipette some nitroglycerine wh
with water. Headache and the usual sympt
though not a particle of the liquid touched

The following experiment, which shows th
susceptible to the action of only one-fortiet
was made with a solution of nitroglycerine c
half drops of the pure substance to ninety-se
hol. The solution was dropped upon sugar,
dissolve on the tongue.

My general health being good, and my
about two and one-half hours after a full me
solution. In two minutes my pulse was nin
bing headache; in five minutes the pulse wa
ache changing from the back to the front of
the pulse was down to eighty-eight, and in f
its normal rate, seventy-nine, although the l
pass off for minutes more. It will be notic
solution was taken equal to only one-fortieth
glycerine.—JOHN M. MERRICK, JR., WALPOL
of Med. Sciences.

OBSTETRICAL

13. *Amaurosis following Parturition.*—Dr
to the Obstetrical Society of London, (April
This phenomena had occurred on seven previ
same conditions, but it did not appear after t
tient was married, and thirty-four years of ag
was total, occurred in both eyes suddenly ab
the birth of each child, and lasted on an a
weeks. The patient had never lost more tha
blood; she had never taken ergot; there wa
milk or lochia, nor was the urine albuminous
scopic examination had been instituted, but t
entirely negative. Dr. Eastlake regarded the
cluded his paper by stating that the only aut
any case at all similar, was Beer, in his "Leh
en."—*Lon. Lancet*: *Amer. Jour. Med. Scienc*

THE

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Original Communications.

ART. I.

Trachoma.

[A Paper read before the Cincinnati Academy of Medicine.]

BY E. WILLIAMS, M.D., CINCINNATI.

[Continued.]

In the last number of this journal, I gave Mr. Hairon's observations in support of the theory of the propagation of trachoma by infection. In the first instance mentioned by him, he attributes the cases of vesicular granulations that originated ten days after the recruits were admitted, to a miasm or poisonous effluvia emanating from *beds* and *bedding* that had been used *two years* previously by a regiment among whom there was, at that time, a large number of granulated. In my judgment it is more reasonable to suppose that the first patients that were attacked had contracted the disease by contagion previous to their admission—from those who had granulations and were separated from the others when they were received; or that they arose from atmospheric vicissitudes or other effluvia not coming from the matter of granulations that had been lying dormant in the bedclothes for *two years*; or that finally they arose from the contagion of gonorrhœa, of which there were doubtless cases among the soldiers all the time. Once that one or two attacks of purulent conjunctivitis had arisen from any of those causes, others could easily be inoculated from them.

The second series of facts which this excellent observer gives, seems more conclusive. In this instance, six hundred recruits were lodged in a large building that had been occupied by a regiment *three years* previously, among whom trachoma was prevalent. In the two wards submitted with all the bedding and furniture to disinfecting fumigations before their reception, no cases occurred; while in the other room where the precautionary fumigations had not been used, thirteen persons were attacked. To make the point still stronger, one year later —that is, *four years* after the *materies morbi* is supposed to have been lodged in the bedclothes—six hundred men were quartered in the same barracks, without the occurrence of a case of granulations. This time all the rooms had been fumigated with chlorine gas for forty-eight hours before their admission.

I can not believe that an infectious miasm could be generated from a little muco-purulent secretion that had been adhering to the bedclothes or other articles four years, unless it could be proven that there was no *possibility* of the disease having arisen from any other cause. The strong probabilities are that the fumigations, ventilation, and other sanitary measures adopted, simply diminished the susceptibility of the inmates to conjunctivitis from contagion and other known causes, instead of destroying a supposed *granular miasm*. I therefore think (very humbly, of course,) that the opinion adopted by the Ophthalmological Congress at the session of 1856, that trachoma is most frequently transmitted by infection—that is, by the intervention of air charged with the contagious principle—is not supported either by the weight of facts or the force of logic. My individual belief is, that the only way in which the disease can be conveyed from one person to another is by actual contact. Still the question is open for future investigations, and whenever the facts preponderate in the direction of *infection*, I shall become *infected* with the theory without obstinate resistance.

Although I do not accept the doctrine of miasmatic transmission, I approve of the prophylactic measures recommended by the Congress, because they conduce to health; to the more rapid recovery of those already affected; and especially to the prevention of propagation by contagion.

I give them simply for their *practical* value, and not from a conviction of their *theoretical* truthfulness:

"1st. From time to time, the wards ought to be abandoned for a few days, for the purpose of disinfecting them.

"2d. The clothes worn by the granulated at the time of admission, as well as those used during their stay, and the bedding, should be disinfected as in cases of *itch*.

"3d. Cleanse, and, if necessary, disinfect the barracks, prisons, hospitals, etc., and all objects used by the soldiers.

"4th. Insist on these regulations, especially at times when there is a general prevalence of trachoma; inspect the eyelids of the soldiers daily; and if the epidemic prevails with violence in certain quarters or barracks, let them be evacuated at once and those men who are affected be separated from the healthy. Wash the bedding and clothes which have been used by the patients, disinfect those objects that can not be washed, and whitewash the walls."

Some of these recommendations appear a little extreme, but it is better to err in the way of sanitary precautions than in the other direction. Thorough ventilation, strict cleanliness and rigid avoidance of all those things by which the contagious matter of granulations may be actually transferred to the eyes of healthy persons, are really all the measures necessary to avoid the spread of the disease. The ultimate object aimed at by the Congress in their recommendations, *i. e.*, the eradication of trachoma from the army, can only be approximately achieved; for there will always be sporadic cases as long as gonorrhœa, atmospheric vicissitudes, and other causes capable of developing the disease, exist. What is true of the army is likewise true of the community. Great good has been done in Europe, and might be here, by the careful enforcement of the above hygienic regulations, in diminishing the prevalence of granulations; but no one is so Utopian, I suppose, as to dream that trachoma, any more than Ricord's celebrated "goutte militaire," will entirely *dry up* before the ushering in of the millennium.

Trachoma, like all inflammatory diseases, may be acute or chronic, not only with respect to the intensity of the symptoms, but also to its duration. It commences as an acute or subacute conjunctivitis, attended in a few days, or weeks at most, by the development of granulations. After a period of from two weeks to two or three months, the acuteness of the symptoms usually abates to a certain point, and in this chronic form the disease runs on, with occasional exacerbations and remissions, for months and often for years. The tendency of granulations is to spontaneous absorption; but the process is so tedious and so often interrupted by paroxysms of inflammation attended by increase in the size of the granulations already existing, and often deposits of new ones, that the recovery is exceedingly slow, requiring years for its completion. Besides the tardiness of spontaneous absorption, there is generally so much disorganization of the conjunctiva, and so much injury done to the cornea, that the sight is permanently impaired. The granulations in time disappear; but there are left behind irreparable structural lesions that keep up more or less irritation and inflammation for the remainder of life, rendering the patient always uncomfortable, and frequently resulting in total blindness.

cicatricial tissue takes the place of the normal conjunctiva, and the contraction resulting therefrom obliterates more or less completely the *cul de sac* above and below, producing symblepharon posterior, impeded movements of the globes, troughing of the tarsal cartilages, with trichiasis and entropium, and their train of disastrous consequences. The inner surfaces of the lids are frequently covered with bands of inodulary tissue intersecting each other in different directions, leaving depressions between them, and giving rise to a roughness and harshness more detrimental often to the cornea than the original granulations. Besides this, the secreting powers of the conjunctiva are impaired, the eyes become dry, and pannus with incurable xeroma is the result.

The symptoms of trachoma are so palpable and characteristic that I shall not dwell upon them. Besides the swelling, redness, perverted and augmented secretion, the itching, scratching and famous feeling of *sand in the eyes*, in a greater or less degree common to all inflammations of the conjunctiva, there are the unmistakable little fleshy elevations studding the membrane more or less thickly, and giving the insides of the lids a rough raspberry appearance. These bodies vary in size from the smallest perceptible dimensions up to that of large mustard or even hemp seeds. They are usually most numerous in the tarsal portion of the membrane, commencing about a line from the free margin of the lid and extending for about the same distance into the reflected portion, beyond the posterior edges of the tarsal cartilages. In the folds of the *cul de sac* they are larger, more isolated and generally less red. Not unfrequently the entire extent of the conjunctiva is covered with them from the margin of the lid to the edge of the cornea, and in some cases I have seen elevated gelatinous looking deposits on the cornea itself exactly like the vesicular granulations seen in the *cul de sac* and on the conjunctiva scleroticæ. I have now a young lady under treatment with most exuberant granulations, who has an elevated gelatinous, semi-transparent deposit on the upper margin of each cornea, running parallel with it for half its circumference, and about a line and a half in width. The blood vessels that traverse it from the limbus conjunctivæ mount suddenly up over its outer edge, and then dip down quite as abruptly at its inner edge, to continue toward the centre of the cornea. This ridge of exudation has existed for several months, and resists absorption to such a degree that several direct touchings of solid nitrate of silver have diminished it but very little.

The diagnosis of trachoma, for one at all familiar with ophthalmic practice, can generally be made without touching the patient. The peculiar sleepy appearance caused by the drooping of the upper eyelids, the redness and swelling of the carunculæ lachrymales and semilunar folds of conjunctiva at the inner canthus, with more or less of dry secretion adhering to the eye lashes, are enough to make the case almost certain. But if the lids are averted, the characteristic morbid growths can not be mistaken.

Granulations present certain peculiarities in different individuals, and in different regions of the membrane in the same individual, which have given rise to their division into papillary trachoma, vesicular trachoma, and mixed trachoma where both varieties exist together, as they most frequently do. The papillary granulations, smaller, redder and more numerous, are found mostly in the tarsal portion, and are probably the natural papillæ hypertrophied by inflammation. The vesicular, in the form usually of isolated, more or less circular, gelatinous, semi-transparent bodies, very much resembling grains of cooked sago, or frog eggs, are found most frequently in the reflected portion, rolling out, when the lower lid is drawn down and the patient requested to turn the eye upwards, in horizontal ridges like strings of beads buried in the folds of the membrane. Sometimes vesicular granulations are few in number, round and entirely isolated. At others they are more numerous, and flow or run together horizontally into continuous ridges, having lost the string-bead appearance in consequence of their confluence. These two forms of granulations usually exist together, the one or the other, however, predominating and impressing its peculiarities upon the case.

Some authors, but especially Professor Arlt of Vienna, have endeavored to prove that vesicular granulation is an entirely different affection from the other variety; not contagious; and being the local manifestation of a constitutional disease, which constitutional disease is scrofula. In the light of all the facts, however, this theory is certainly untenable, high as is the authority of that distinguished writer and teacher. I have seen vesicular trachoma again and again resulting from muco-purulent conjunctivitis, in perfectly healthy subjects, and spreading by contagion just as the papillary form. Indeed, as I said before, they most frequently exist together, and are the products of conjunctivitis arising from contagion or other irritants. I believe granulations of all kinds are but products of a purely local disease, curable by exclusively local treatment.

Vesicular granulations are usually preceded and attended by less inflammation than the papillary. Not unfrequently we see patients with

immense numbers of enormous vesicular granu
give rise to any other than mechanical inconv
slight redness, but little secretion, and no pa
symptom except drooping of the eyelids. Bu
harbor these little bodies for months without
flammation, still they are daily and hourly lia
tainly be submitted at once to treatment.
Congress of 1856 voted the following recomm
"Employ against incipient granulations (vesic
must by no means be neglected,) those means
to vivid reaction and to inflammation of the co
quotation it will be seen that they consider th
as the "granulation naissante" or incipient
other variety being the result of metamorphos
lar form produced by inflammation. From
bound to dissent, from the fact that I have
in the same case at the same time; the one p
and the other the papillary appearance from
the primitive form were the vesicular, and the
advanced organization, we should see them in
parts of the conjunctiva, whereas they are very
in the parts back of the tarsal cartilages and
Hence there is reason to believe that their p
way dependent upon the special anatomical s
the membrane in which they are found. In t
hypertrophied papillæ, and in the other either
mucous follicles or circumscribed patches of e
form from the peculiar disposition of the b
junctiva.

The usual appearance of papillary granulat
the normal papillæ, and of the vesicular in t
follicles, is a strong proof that both varieties a
morbid process, modified in their form by the
cially by the papillæ and the follicles, in and a
tion chiefly occurs. Hence *papillary* and *foll*
most appropriate designations.

(To be continued.)

ARTICLE II.

A Case of Recto-Vaginal Laceration.

BY SAMUEL MARTIN, M.D., XENIA, O.

Mrs. ——, æt. 26, first pregnancy, was confined July 30, 1863. With every possible care, recto-vaginal laceration occurred. The history of the case dissipates all doubts on the subject. The physician administered purgatives preparatory to an operation. August 2d, I visited her. The medicines had not yet acted, and the operation was necessarily deferred until the 3d, when the bowels were freely evacuated. We examined the parts carefully, and, as anticipated, the rectum and vagina presented one large cavity, the finger passing from the vagina through the lacerated perineum into the open rectum. The operation being agreed to by the patient, etc., etc., she was placed as in the operation for lithotomy. The edges of the wound were quite fresh; some feculent matter adhering, had to be sponged off. A curved needle armed with a double ligature, held with forceps, was inserted more than half an inch from the edge of the laceration, and at the very verge of the anus to the full depth of the rend, then carried from beneath in the opposite side to about the same distance; two others were inserted in the same way, the latter as close as possible to the vulva. The quilled suture we regarded as the most appropriate. A gum-elastic bougie of proper length placed on both sides and the ligatures tied. The parts now looked very secure, the limbs bandaged above and below the knees. She was now placed on her back in bed, suitably arranged, with her limbs flexed, and a pillow placed under them. A perineal pad and T bandage, with cold water dressings, for two or three days, the bandage and pad continued during her confinement. The inconvenience of position only lasted a few days, as is the case in fractures of the lower extremities. The operation was performed without chloroform; very little pain was experienced or complained of from the introduction of the needles. Cautioned as to any improper exertion and movement, a large dose of morph. sulph. was administered, constipating medicines freely given, and the diet selected was the essence of beef with a little sago, from which there would be very little excrementitious matter. Retention of urine required the catheter from July 31st until August 27th.

August 7th, I visited her. The sutures and laceration looked very well. I felt hopeful that union would be accomplished.

August 9th, I received a letter from her attending physician:

"This morning I discovered that two of the (the two next the anus) ; the parts appear so voluntarily, at times, she says she can contr better come and see her."

August 11th, I visited her. All the sutu looked very well and solid. I felt anxious condition, and perhaps imprudently carried and so far as the touch could discover, union introduced a finger into the rectum ; this caus fluid excrement to pass into the vagina. If, not rectify this, and a recto-vaginal fistul the actual cautery—aided by the various spe ina and rectum. Still there is much accomp

August 15th, I visited her. Every thing

August 18th, I had a letter stating that " great tenderness on pressure all over the abd swelling, pulse 100, and headache. I thou constipating plan as long as she could bear it spoonful of epsom salts night and morning. yesterday morning (17th). She retained it f ducing my finger into the rectum, some flat vaginam."

The above letter did not relieve my anxiet letter saying, "Mrs. —— is better than whe Her bowels have been moved ; discharge quit control the sphincter, but I doubt it."

August 28th, I heard again from her phy pensed with the use of the catheter on Tues a passage from the bowels, from the effect of says it altogether came by the rectum, and the sphincter."

September 3d, I had an interview with her tinuing better.

The above case must rest on its own merits. not new. The surgeon cannot well dispense w neal pad, position, constipating medicines an silver catheter, with a large male elastic one the physician to conduct the urine more read serve the bed from the urine. When deemed bowels, the fæces should be rendered as thin a so for some time.

Should the lady again become *enciente*, is there greater danger of the perineum ? Will the cicatrix lacerate more readily ? Perhaps not. "*Cave perines*" should be inscribed on our left hand, with the adjuvants venesection and tart. antimony ; "*arte non vi*," also expressed by the eccentric Blundell, should be remembered. Is it possible in every case to protect the perineum from laceration ? I fear not. That it can be prevented in the greater number, I doubt not.

The above is the only case of recto-vaginal laceration I have met with during a tolerably extensive obstetrical practice for more than forty years.

P. S.—To-day, September 10th, I saw her physician. She was so well as to be able to make a visit to her father's, some six or seven miles distant, where she was unwell for a few days with a slight attack of dysentery. She is now better, and no evidence of a fistulous opening.

ARTICLE III.

Cleanliness, Bathing: their Influence in Promoting Health, and thereby Counteracting the Tubercular Diathesis.

BY A. P. DUTCHER, M.D.,
Of Enon Valley, Lawrence County, Pennsylvania.

I.—Cleanliness a Virtue and Luxury.

Cleanliness is one of the first moral virtues. It is intimately associated with every thing that is pure and lovely. It has been enforced in both the Jewish and Mohammedan law as part of their religious observances. No uncleanly person was allowed to enter the congregation to worship God; they were strictly prohibited. The Greeks and Romans were so much impressed with its importance that they made bathing one of the principal duties of the day. Under the Christian dispensation it has been enforced with peculiar emphasis. Physical and moral purity always go hand in hand, hence water, or baptism by water, is used as a type of spiritual cleansing.

Cleanliness is not only a great moral virtue, but an important luxury. Nearly all the various avocations of life are attended with more or less active exercise, which increases the cutaneous secretions, and demand frequent ablutions in warm water to keep the skin clean. It is true, however, that all trades are not alike in this particular. There are some occupations in which the operative can not pretend to be clean, while he is actually employed; to attempt it would be affectation ; but there is no reason why he should not enjoy the feeling of

perfect cleanliness when work is over. Ot
neat while engaged at their work, but there
exempt from the need of water.

Only he who has made the experiment ca
the feeling produced by a thorough warm a
and exertion. "To wash one's self," says
cellent work on Baths and Mineral Waters,
more extended meaning than people generall
should not consist merely in washing the
towel over the face, and sometimes the nec
extend over the entire surface, and it is par
often least thought of, as at the bends of th
bath, with the aid of a little soap and spo
may be completely performed, with a feeling
and of much pleasure afterward."

II.—Bathing Necessary to H

If bathing affords so much comfort, it c
No person can be in health, whose skin is o
mitted by all who think and write upon the
system. It is the skin which is the seat
about thirty-three ounces pass through ever
when there is no visible moisture on the sur
ulator of animal heat; it is a great abso
much of the effete matter left in contact wit
ness. It is in close connection with almost
of the system.

A glance at the above facts will show th
attention. But this wonderful covering of
important offices to perform. It not only l
in air, as well as watery vapor; so that it m
the part of the lungs, by secreting and abso
some animals, indeed, as in the leech, all th
skin, and you may kill a frog as effectu
over, as by tearing out his lungs. The filth
ed person is not unlike such a varnish, and
under a sort of half-suffocation. The ou
scrape away is a deposition from the tru
washing and rubbing softens this outer skin,
off the dead parts with a brush or a hard to
baths, of whatever temperature, are useful.

and freed from obstructions, and a way is cleared for the passage of the proper fluids and gases. On a subject so important, I trust these little details will not be considered out of place.

Dr. Erasmus Wilson, in his work on the Management of the Skin, says: "To arrive at something like an estimate of the value of the perspiratory system, in relation to the rest of the organism, I counted the perspiratory pores on the palm of the hand, and found 3,528 in a square inch. Now, each of these pores being the aperture of a little tube of about a quarter of an inch long, it follows that in a square inch of skin on the palm of the hand there exists a length of tube equal to 882 inches, or 73½ feet. Surely such an amount of drainage as 73 feet in every square inch of skin—assuming this to be the average of the whole body—is something wonderful, and the thought naturally intrudes itself, What if this drainage were obstructed?" Would it be possible to furnish a stronger proof of the necessity of maintaining a healthy state of the skin?

III.—The Different Kinds of Baths.

The cold bath is the most natural, and the most easily taken, but it is not always proper or safe. There are some, I know, who recommend it indiscriminately to all persons, at all seasons; but such is not the advice of wise physicians. "In proportion as cold bathing is influential in the restoration of health when judiciously used, it is hurtful when resorted to without discrimination."—*Dr. Andrew Combe.* "Many persons in vigorous health can not tolerate the cold bath for the shortest period, still less can they habitually use it with benefit. Even they who have accustomed themselves to it are in danger from the practice, if it be continued after any sudden diminution of vital energy, by whatever cause produced."—*Dr. John Bell.* Both of these eminent physicians recommend for habitual use the tepid or warm bath.

Nothing is more erroneous than the opinion entertained by some physicians, that the warm bath is enfeebling. They speak of the cold bath as *bracing*, and the warm as *relaxing*. But these terms are too mechanical, and are not very applicable to vital actions, and are simply metaphors when applied to the physiology of bathing. Travelers in hot countries tell us that when overcome by inward heat, and so exhausted as to be ready to faint, they have been made as fresh and strong by a warm bath as on rising in the morning. It is recorded of the distinguished Count Rumford, that he once repaired to Harrowgate, in very feeble health. Such was his fear of taking cold from

the warm bath, that he used it only once in
fifteen minutes, and always went to a warm

But finding this unattended with benefit
and bathed every day at two o'clock, for h
and ninety-seven degrees of Fahrenheit, for
"The salutary effects of this experiment,"
evident to all those who were present, and s
the advantages I received from it have bee
state of health which I have since enjoyed
He also exposes the mistake of those who
fear of taking cold; as, indeed, one has n
taking cold after being in a warm bath, tha
in the air of a frosty morning. There are
do not derive great benefit from the regular
still fewer who are in any way injured by it

IV.—What is Meant by a War

By a tepid or warm bath, we are to und
temperature ranges from 75 to 98 degrees F
Now this, so far from heating and irritati
supposed, has a most soothing and tranqui
on immersion in a bath of about 90 degree
the respiration more equable. If the heat b
look for accelerated pulse, flushed cheek, a
perspiration bedewing the head and face.
individual should remain in the bath depen
cumstances. For the ordinary purposes of
vigorating the nervous system, fifteen or tw
long.

At the time of immersion, individuals in
careful to maintain the proper temperature o
from time to time, portions of water from it
er water. On coming out of the bath, the s
be wiped thoroughly dry, and if the person
it would be well that the operation be perf
that no sense of chilliness be experienced.
tion in some cases, to have the bathing roo
is required under ordinary circumstances.
not be less than 80 degrees.

V.—The Best Time for Bat

The best time for using the warm, as wel bath, is when the stomach is empty, and especially an hour or two before dinner. It agrees, however, with many persons very well about four hours after dinner. In summer, just before supper is a good time. Many individuals are deterred from taking it at either of the times mentioned by the fear of catching cold afterward, in consequence of exposure to the open air. The error here proceeds from confounding the effects of overheating and fatigue, after violent exercise, with those produced by the warm bath, whereas they are totally dissimilar. In the former case the skin is cold and weakened by excessive perspiration, and doubly liable to suffer from reduced atmospheric temperature. In the second, on immersion in warm water, the heat of the system is prevented from escaping, and has rather a tendency to accumulate, so that in fact the living body is, after coming out from this kind of bath, better prepared to resist cold than before.

This is fully demonstrated by the practice of the Russians, who rush out from a vapor-bath and jump into the nearest stream of water, or roll themselves in the snow. Now in this case the impunity with which they expose themselves to the extreme cold is precisely in the ratio of their prior excitation by a hot bath. Were they, immediately after stripping themselves, to plunge at once into a cold stream, severe cold or inflammation of some of the internal organs would be the consequence.

The more vigorous the frame, and active the circulation of an individual, the lower may be the temperature of the bath. The aged and the feeble, and those whose hands and feet are habitually cold, require it to be near the degree of blood heat. It is said by physiologists that the more immediate cause of old age seems to reside in the irritability of the minute tissues of the body, or blood-vessels; hence they cease to act, and collapse, and become impervious to the blood. The warm bath is particularly adapted to prevent those circumstances, by its increasing our irritability, and by moistening and softening the skin, and the extremities of the finer vessels which terminate in it. To those who are past the meridian of life, and have dry skins, and begin to be emaciated, the warm bath, for half an hour two or three times a week, is eminently serviceable in retarding the advance of age.

VI.—The Warm Bath Best for Young Children.

Young children, until they are at least six or seven months old, should always be bathed in warm water; after this, the cold bath may be gradually substituted, providing they be healthy. Instead of washing the child with a sponge or flannel as is commonly practiced, it may with benefit be occasionally plunged into a cold bath, provided it be not winter, that a proper degree of reaction takes place immediately after, and that the child is not frightened. I have on more than one occasion seen children very much injured by the fright induced by suddenly plunging them into a cold bath. There are some children who have an unaccountable fear of water, either warm or cold, and appear to experience great distress on being suddenly put into a bath. Where this is the case, it would be well to dispense with it altogether.

"The bath," says Dr. M. Hall, "should indeed never be used so as to leave any impression of coldness, or actual loss of warmth, or lividity of any part of the surface. And when we consider how readily infants lose their temperature, and how slowly they regain it, we shall view the cold bath as one of those measures requiring great precaution in infancy. The best kind of bath is a shower-bath of great simplicity. It consists of a tin vessel in the form of a large bottle, pierced at the bottom like a cullender, and terminating at the upper part in a narrow tube. When put into water it becomes filled with this fluid, which is retained by placing the finger upon the tube; on removing the finger the water flows out gradually. The quantity and temperature of the water must be proportionate to the age and powers of the child, the weather, and the season. It should be warm or tepid for infants at first; afterwards it may be used a little cooler. Its tonic effect may be augmented by the addition of bay salt, and by active rubbing. The first few baths may be quite warm, and made a sort of commencement, until the infant is familiar with the little shower."

VII.—The Warm Bath very Useful in the Treatment of some Diseases.

There are few things more useful in the treatment of some diseases that children are subject to, particularly scarlatina, than what has been called the *affusion bath*. It is one of our best remedies, and I seldom ever treat a case of the above named malady, without prescribing it. The mode of employing it is simply this. A large tub or pan capable of containing several gallons of water should be brought into the sick room, and the child should be placed on his feet in it, and supported in a stooping posture. When two or three gallons of water of the temperature of 90 or 96 degrees of Fahrenheit, should be poured upon the nucha and shoulders so as to run off at the feet. As soon as this is finished, the child should be wrapped in a flannel dressing-gown, without wiping the body, after which it may be placed in bed.

If the fever is not sensibly reduced by the first affusion, it may be repeated again in two hours, and so on until the violence of the disease is subdued. In simple scarlatina it will speedily lessen the fever, and cause it to run a very mild course. For all the ordinary purposes of bathing, this method of using water is much better than the common plunge-bath. It is not so apt to frighten, fatigue or irritate the child, and experience proves it to be more refreshing and tranquilizing.

VIII.—Tubercular Subjects should never Bathe in Cold Water.

Individuals who are laboring under the pre-tubercular stage of pulmonary tuberculosis should never bathe in cold water. I do not know of a single thing that has proved so decidedly hurtful to phthisical patients as this. The advocates of Hydropathy will have much to answer for on this score. Their cold bath, wet jacket, cold wet-sheet packs, and total abstinence from all animal food, have been the means of cutting short the lives of many who, under an opposite and more generous mode of practice, might have had their lives prolonged for several years, and been a comfort and blessing to those who were depending upon them for support and the endearments of social and domestic life.

Perhaps there has never been a book published which has been the means of doing more injury to persons laboring under pulmonary tuberculosis, than Dr. Joel Shew's, "Consumption: Its Prevention and Cure by the Water Treatment." It made its appearance at the time Hydropathy was at the summit of its popularity, and thousands embraced its delusive teachings, only to find a premature grave. Dr. Shew more than intimated that he had verified the truth of his theory of phthisis, that he knew that the cold water treatment would cure it. He ignored the use of flannel underclothes, prohibited the use of animal food, and recommended cold bathing, and the wet jacket, with moderate exercise.

But a few years' experience has dissipated the dreams of the enthusiast. Sober and candid hydropathists admit that, so far as phthisis is concerned, their treatment has resulted in a perfect failure. And I am acquainted with two Water-Cure establishments, where they refuse to receive phthisical patients, assigning as a reason that their plan of treatment is not beneficial in this disorder. And I am fully satisfied from my own observation, that, if any individual suffering under pulmonary tuberculosis desires to have his malady cut short, and get out of the world in a hurry, let him go to a Water-Cure.

I may be deemed uncharitable by some in thus expressing my views

of Hydropathy. But such are my convictio
of careful study and long observation. In
ly say, that I never knew an individual
derive the least benefit from the hydropathic
been a constant reader of the *Water-Cure J*
years, and I have never seen a well-authenti
sis reported in that journal. Cases have
but when they have been thoroughly examine
be simple cases of pneumonia or bronchitis,
would have recovered without any treatmen

Proceedings of So

Proceedings of the Cincinnati Acad

Reported by W. T. Brown, M.D.,

Hall of Academy of Me

Rare Surgical Case.—Dr. Blackman said
he went to Toledo to see some of the w
accident. He saw one man through who
his fist had passed. It went in on one side
above the umbilicus. He was first attended
who pulled the shaft out. The intestine
They were immediately replaced, and the m
digestion is good. This is among the ra
could find nothing like it reported. Sir Ast
cessful case, in which a shaft passed throug

Dr. B. said he would like to ask Dr. C
physicians, if they had ever known of a cer
Ohio. He asked, because there is a case repo
some thirty years ago, of a luxated thigh re
by means of manipulation. This case is pr
ations being reduced in this way. He tho
have a committee appointed by this Academ
upon American priority in operative surgery.
an American operation, but now the Briti
He thought the first time it was performed
State, Kentucky.

Dr. Carroll said in a case of dislocation of the thigh some thirty years ago, a Dr. Robinson in Hanover, Columbiana County, Ohio, tried to reduce it by extension, but failing in this way, he tried manipulation, and by throwing the limb upwards succeeded in reducing it.

Obstetrics.—Dr. Gans said in order to show the ignorance of some of the midwifes, he would report the following case:

Last Thursday night he was called to see a woman upon whom a midwife had been in attendance all day. The midwife told him every thing was all right, that the head was most through, but the pains were not strong enough, also that she had given her ergot, but the pains produced by it had gone off. The Doctor said he now made an examination and found the os uteri pressed down almost external, but no child and no pregnancy. The woman had menstruated regularly.

Several similar cases were reported by Drs. Comegys, Dodge, and others.

Delirium Tremens.—Dr. Bramble reported three cases of delirium tremens all occurring in his practice at the same time. The first case was that of a butcher. He was a man of full habit, six feet high, and weighing 190 pounds. For some time previous he had been irregular in his habits. Last Tuesday a week ago he retired as well as usual, but could not sleep. In the morning he was sent for. He found him with a pulse of 130, full and strong, countenance flushed, pupils contracted, mind rational, yet he could not sleep. This was his third attack. He prescribed a purgative of half an ounce of sulphate of magnesia, and one-quarter of a grain of tartar emetic, every two hours. This he continued for thirty-six hours. His pulse was reduced to a hundred, countenance less flushed, pupils dilated. Friday, he continued the tartar emetic in combination with fluid extract of valerian and lac assafœtida. Saturday, his pulse was 80, pupils dilated; treatment continued. In the evening his pulse was reduced to 70, still he had no sleep. He prescribed for him two grains of opium in combination with assafœtida every two hours. At no time before this was well marked delirium, but now delirium commenced. He had to return to the use of tartar emetic. He gave him over a quarter of a grain every two hours. Monday, he gave it every four hours, pulse 80, pupils dilated. He again prescribed opium, but with the same effect as before. He returned to the use of tartar emetic. Patient is now convalescing. He did not sleep for six nights. He had some appetite all the time. The other two cases, a tailor and a blacksmith, each below par, they had a pulse of 65, pupils dilated; both patients

was delirium, not [illegible]. He prescribed large doses
They convalesced speedily.

Dr. Comegys said the wards of the Commercial Hospital
gave many such cases. He prescribed the black [illegible] i
patients were excitable, he then gave tartar emetic. I
hand, the pulse was soft, pupils dilated, etc., he ordered
treatment, half a grain of morphine and half an ounce
assafoetida every two hours. A year ago he attended an
moulder by trade, on West Fifth Street. He had been
drinker. He was delirious, had a strong pulse, pupils cont
not hot. He gave him tartar emetic for forty-eight hour
benefit. He then tried the opiate treatment. In four day
him what amounted to 200 grains of opium without produ
sleep. His strength beginning to fail, he determined to tr
of chloroform. He put him to sleep in twenty minutes. I
at first the most terrific muscular exertion, but he was so
slept, but was easily roused. Within the last three month
most violent case in the Commercial Hospital. Tartar em
and chloroform all failed to quiet him. He then tried w
half a grain of morphine and half an ounce of tincture assaf
two hours. The man recovered.

Dr. Bramble said he tried chloroform in the first he repor
only rendered the man more violent.

Dr. Taylor said such cases as the first one reported by Dr
where there is great tremor and but little delirium, are the
cult to manage. While he was house physician in the C
Hospital, an old man, sixty-five years of age, was broug
violent tremor, but little delirium. He gave him opium in l
At one time he gave him a scruple of extract of hyoscyamus
after several days was he subdued. Chloroform he had se
such cases, but he would hesitate about giving it because of
muscular excitement it produces.

Dr. McIlvaine said he had given tinct. lobelia with very h

Dr. Carson asked if any one had used tincture of digital
of the English physicians are using it.

Dr. Comegys said Dr. Brower, of Lawrenceburgh, told h
had the happiest results from tincture of digitalis. He
tincture veratrum viride would produce like good results.

Dr. Carson said he had a patient in St. John's Hospital
been in the habit of taking large doses of morphine eve
years. She would take as much as twenty grains ev

ing before breakfast. If she did not get it, she would be sick and could not eat. He gradually reduced the dose, so that in two weeks she abandoned the use of it entirely. At first he gave a smaller dose of morphine, then substituted tincture of hyoscyamus in two-drachm doses four or five times a day. When she left the hospital she did not take anything. She came back in a few months quite well, never having resorted to the use of morphine again. As to her appearance, she was small of stature, rather sallow and not very nervous.

Dr. Comegys reported a case of psoas abscess. The woman had been in the habit of taking four grains of morphine at a dose seven times a day. To break up this he gave her extract conium in large doses. He gave as high as seventy-five grains day after day, with subcarbonate of iron. His patient got well.

Dr. Taylor said an old man, 60 years of age, sent for him about a year ago. He had been addicted to the moderate use of liquors and opium, but determined to abandon their use entirely. He was quite nervous. The Doctor advised him to reduce the amount of each one-half at first, and to take strong beef tea. His mind was unimpaired, but he became more and more feeble every day, and died in ten days after from exhaustion. He was unwilling to take either liquor or opium.

Singular Disease of Testicle.—Dr. Williams reported the case of a soldier in the Marine Hospital, a stout, healthy man, admitted Aug. 23. Had had gonorrhœa, and had taken copaiba and cubebs until the discharge ceased. When he came under his care, a week after cessation of discharge, he had epididymitis, the inflammation extending to the testicle, which was as large as his fist. Had him leeched, and prescribed saline purgatives in combination with small doses of tartar emetic, locally applied mercurial ointment and extract belladonna, and had him wear a suspensory bandage and lie on his back. The pain was relieved, and the swelling much relieved. There were about this time some young gentlemen going through an examination for positions in the army, who examined the man's scrotum, and some of them, as he says, rather roughly. The next day the swelling was increased. He treated him in the same way as before. In four or five days he detected fluctuation. He ordered a poultice to be applied. The acute symptoms subsided in a measure, but the fluctuation was so distinct, he made an incision into the testicle and half an ounce of pus escaped. He then inserted a tent, which he removed the next day, and in passing a new tent in he found something blocking up the wound. Upon examining the case very *carefully*, he found he could move what seemed to be a

globular body around with his probe. It did
He enlarged the opening and the body escape
he had suspected, the testicle. It had been co
that spontaneously. There could be no do
testicle as he had had it examined by two go
trabecula and tubuli seminiferi were plainly
took place between the tunica albuginea and t
straight tubes from the epididymis. Velpea
one case of abscess of the testicle unless
scess of the testicle from simple inflammat
Mr. Skey of St. Bartholomew's Hospital,
April number of the *Lancet* an interesting ca
the testicle. In the case of the soldier, two
the wound had healed. There was no disc
organ remaining in the scrotum larger than t
sidered the epididymis.

Dr. Gans said he had not seen, nor did he
of a case when a testicle came away as repor
tion takes place, but not with the symptoms
The discharge is not like that of cellulur t
can be drawn out, unravelled as it were until
away. He could not conceive how the testic
ed, could separate in the way reported. He
that the body was not the testicle, but a sm
mained dormant until injury or inflammation
and loosened the body. And the fact of so m
ing made him believe there was still a testicl

Operation for Imperfect Hymen.—Dr. Frie
case: First saw Miss E., aged 15 years, i
Dr. Moore saw her a day or two before and i
him. Found her suffering great pain in t
mother informed me that she had seve
been attended by two other physicians. Th
of the case induced me to suspect menstrual
perfect hymen. My request to make an exa
found the external organs very small and n
examination per rectum, I found a round m
diameter projecting back upon the rectum
Believing the mass to be the uterus, disten
requiring an operation, I invited Prof. Blac
operate upon it, should it be deemed proper t

the condition of my poisoned hand at that time rendering me incapable of operating myself. Upon consultation, we deemed it best to defer the operation for a time, hoping that vicarious menstruation might take place, and at the same time afford us an opportunity to determine, in the event of an operation being forced upon us, whether to puncture through the rectum, or to make a dissection between the urethra and rectum. The latter we deemed exceedingly critical, because of the apparent absence of much cellular material between the two canals. We directed five doses of opium, left the case and saw no more of it until five weeks ago, when I was again called. I found her suffering intense pain; and, upon examination per rectum, found a very great increase in the size of the uterine mass. Regretting the absence of Prof. Blackman, who was then in Europe, I felt it my duty to lose no time in giving relief by an operation. Reflection upon the case, however, satisfying my mind that a dissection between the canals would afford the safest and most permanent relief, I decided upon that course. With the assistance of Drs. Muscroft, Fishburne and Moore, I placed my patient in the usual position for an operation for stone. With a staff in the bladder and my left index finger in the rectum, I made a transverse incision of two inches and a half, continuing the dissection in line towards the mouth of the urethra for two and a half to three inches, when I found my finger in contact with an elastic or fluctuating mass, but no physical sign of the os uteri. After a minute's hesitation as to the propriety of puncturing, I decided to do so, with a trocar, and dilated the opening somewhat with a canula. Withdrawing the canula, I made further dilatation with my finger, when nearly one pint of fluid, the consistence of thick tar, was discharged. I made further dilatation with a probe-pointed bistoury, when we found a small sac, and in it the mouth of the uterus, sufficiently open to admit a large catheter. I kept the incision open with bougies made of firm tallow candles. Her general health being very delicate, the cure was somewhat protracted. Now, however, her health is good. The opening, the size of a finger, has perfectly healed, and the cure complete.

◆

Ice in Sea-Sickness.—Ice is recommended as a sure remedy as well as a prophylactic against sea-sickness. A traveler states that he has tried it himself with success, and that if the stewards of steamers would keep a supply of lemon water ices on board, they would profit themselves and render great service to their passengers.—*Phil. Med. Reporter.*

Correspondence.

Letter from Boston, Massachusetts.

BOSTON, MASS., Nov. 10, 1863.

MESSRS. EDITORS :—The introductory lecture to the annual course of Medical Lectures was delivered, at the Harvard Medical College, last Wednesday, by Prof. George C. Shattuck. The lecture was to be given by Prof. Storer, but a protracted illness, some little time since, and subsequent engagements, prevented. Rev. Thomas Hill, D.D., President of the University, presided and opened the exercises with prayer.

The address was well written, and the sketches of many of the great fathers of medicine were beautifully drawn, and gave evident satisfaction to the large assembly of students and physicians who were present. The following is a brief outline of the lecture, as reported in one of the local papers:

> "After a few introductory remarks, the lecturer said that the Chief Magistrate of the Commonwealth, in a time when so many were exposed to wounds and disease, had not neglected the cause of medical education, but had taken great pains to secure for our soldiers educated and competent medical officers, and guarded them from ignorant pretenders. Such care demands recognition from the profession.
>
> "The field of medical labor was then elaborately reviewed by the speaker, who gave brief biographical accounts of Hippocrates, the father of medicine, Galen, Esculapius, and early practitioners, to illustrate the great importance of preliminary training, culture and education, and to show that long, laborious and successful culture resulted in securing the highest honors and substantial rewards of professional life.
>
> "The subject was further illustrated in the examples of later practitioners abroad, and by the history of the college itself, which furnished instances of successful professional labor on the part of former officers and patrons. The speaker referred incidentally to the importance of the study of chemistry and anatomy, and the advantages afforded by their school of medicine in prosecuting such studies over pill-venders, hydropathists and those who merely acquire a knowledge of symptoms, in the army and navy practice.
>
> "The lecturer concluded his address by inculcating the necessity of cultivating self-denial, self-control, and moral qualities as essential to professional success."

The course of lectures at the Female Medical College has also commenced. From the fifteenth annual report of this institution, it appears that a new school is soon to be opened in New York, being the third in the United States, and that in 1848, when the Boston School first commenced, there was not a graduate female in the country who had received her professional insignia from any medical organization, but that now there are about two hundred and fifty, distributed over twenty-one States and the District of Columbia.

A hospital car, designed for the transportation of invalid soldiers between New York and Boston, has been put on one of our lines of railway. One car will leave each point daily. Three cars have been fitted up with generous liberality, on the part of the railway companies. Each car contains nine litter beds and twelve folding, reclining hospital chairs in addition to ordinary car seats. Each litter bed is an ordinary hospital litter with legs, suspended by elastic bands attached to stancheons, and provided with arm rests. They can all be removed in a few moments, and so packed as to occupy the space of but one litter, and their places supplied by the folding easy chair, each with a pillow attached. Each car will be in charge of a military Hospital Steward and Nurse. Each car contains a closet provided with medicines, lint, bandages, tourniquets, plasters, sponges, etc., a closet for stimulants and culinary stores, such as extract of coffee, condensed milk, beef stock; culinary apparatus capable of providing food for fifty invalid soldiers, and a constant supply of hot water.

The car is furnished with air and water pillows, hospital clothing, etc.— everything in its appropriate place. A bell at each end of the car is used to call the attention of the attendants. Sick and wounded soldiers can now be conveyed on the same litter from the battlefield to this city without removal in transportation. To the cordial interest manifested by the Medical Department is due in a large measure the successful appliance of this means of transportation between this city and New York, and the humane and gratifying results that can not fail to follow its operation.

A Retreat for Intemperate Women is about to be opened in the immediate vicinity of this city. We have in Boston a Retreat for Intemperate Men; but there is no similar institution for females of good social position in New England; except the public and private lunatic asylums, which are wholly unsuitable for this unfortunate class of the community.

From the Report of the Boston Dispensary for the year ending Oct. 1, 1863, it appears that there were 8,696 new medical patients at the central office, during the year,—men, 1,278; women, 3,980;

children, 3,438. Of surgical patients, ther
women, 983 ; children, 1,285. In the va
1,514 men, 3,771 women, and 4,364 chil
21,340. Of the old and new patients there
and 6,231 surgical,— total, 26,598. Ave
births in in the district, 214 ; and 250 deat

Dr. George Hayward, of this city, died v
October, at the advanced age of seventy-tw
unknown to the profession of this country o
filled many important posts of honor and
interesting reports on medical subjects to
elected Assistant-Surgeon to the Mass.
then Junior Surgeon in 1830, and chief in
tained till 1851. Since then he has been
geons. He has been President of the Mass.
many years a member of the Board of Con
city. At the time of his death, he was
Examiners for Military Surgeons. In all
faithful and devoted ; and the profession he
have sustained.

A memorial has been presented to the
Hospital, in behalf of about eight hundred
professions, asking that a part of the Hospi
practice of Homœopathy. Of course, the
periority of Homœopathic over that of All
that some place may be provided where the
may enjoy their choice in the systems of pr

The Bracket Splin

27 Indiana Avenue, Washington,

Dear Sir :—While in charge of the O
ville, Tenn., I had the opportunity of tes
two cases of compound fracture of the thi
mitted on the 22d day after receiving th
seemed beyond the reach of remedies, as th
and (what I termed) local tetanus of the
limb. Amputation was suggested, but
knee, especially secondary amputations, ha
very case, that suggestion was abandoned.

placing the muscles of the injured limb on a normal stretch, together with a supporting treatment and diet, it would give the patient the best chance to recover. The Bracket Splint was applied, and in a few days after its application all untoward symptoms disappeared. In eight weeks after the officer's admission, he was sent to Cincinnati, and came under the care of Prof. Blackman. I have spent some time in perfecting the Bracket Splint, and have so far succeeded as to make one splint suit every variety of compound fracture of the thigh, where such a splint is indicated; and further, by taking off the brackets, the splint can be so adjusted as to apply as well to simple fractures. I am just up from a sick couch, and can not now write out a description of the splint as improved by myself.

As I desire the profession to judge of its utility I intend to write out a full description of the splint. I am quite sure that in one of the cases referred to in this letter it was the means of saving the life and limb of a gallant officer, who was wounded while stemming the heavy charge of the rebels on the 31st of December, 1862, at the battle of Stone River. When my health will permit, I wish to write out the history of some surgical cases and ask you to publish. My reasons for intruding this upon you are, that I wish the credit of what is my due in the use of appliances heretofore not used.

Respectfully yours, WILLIAM ARNOLD.

Ohio State Medical Society.—A Question in Ethics.

DAYTON, OHIO, Nov. 14, 1863.

Editor Lancet and Observer:—Those of your readers who were present at the last meeting of the State Medical Society will probably recollect that a member from this city was expelled, the expulsion being based upon the action of the Montgomery County Society.

Some of the profession here and hereabouts, members of both bodies, regretted this action; they thought the expelled member rather severely dealt with, the offence not being serious, and the punishment disproportionate to it, while they doubted the wisdom of the policy which dictated it. They would not willingly believe that one who was past middle age, who had attained an enviable position in public favor, who had at command a very extensive practice, and who in every respect was far above the *necessity*, would willingly lower himself to any of the mean arts of quackery; while, on the other hand, they would willingly overlook any slight irregularity to retain an

influence of some weight with the public,
scientific medicine.

But all these doubters of the wisdom of
all friends of the expelled member, are now
paper currency, a specimen of which is befo
ment in bank-note form, the chief part of

"The S–ph–l–s B
For Two Dollars will pay One Bott
VEGETABLE SYPHILITIC

It is signed by the Doctor in full, with t
"Proprietors ;" the face is adorned with v
among which we may read that it is "ag
quires no change of diet," "cures speedily
the back is finished in greenback style, and
"effectual antidote," "cures the most ob
five dollars will buy three bottles of it, i
& Co., Dayton, Ohio."

Now, Mr. Editor, we call the attention o
rency issue, for another purpose besides t
those regular physicians who sometimes co
see with what manner of man they associ
no one, with a particle of self-respect, c
the author of such a dirty manner of adv
of business. If he can afford to lower hi
tainly the profession should thank him for le
he stands. Yours,

Sulphate of Copper in Pencils.—M. Llo
and potass (ordinary potass alum); mi
this salt with two of sulphate of copper.
and placed in a clay or porcelain vesse
other sufficient source of heat, so as to be
The mass, when melted, is poured into a m
bronze, so as to prevent the precipitatio
pencils obtained are of a clear, bluish, gree
externally, and offer some resistance to bre
ty of the sulphate of copper remains unimp

Reviews and Notices.

The Principles and Practice of Ophthalmic Medicine and Surgery: By T. WHARTON JONES, F.R.S., Prof. of Ophthalmic Medicine and Surgery in University College, London, etc., etc., etc., with one hundred and seventeen illustrations. Third and revised American edition, with additions. From the second London edition. Philadelphia: Blanchard & Lea. 1863.

Jones' *Ophthalmic Medicine and Surgery* is a work familiar to that portion of the profession especially that cultivate eye surgery to any extent. We have heretofore noticed it with favor in this journal. The progress of this specialty is well exhibited in the very improved edition of the book now before us. The present edition is thoroughly revised, bringing up the science to the present day, fully treating of its important improvements in both principles and apparatus. This American edition is edited by Dr. W. F. Atlee, of Philadelphia, and while we scarcely approve of the habit (more frequent in the past than now) of appending as a tail the name of an American editor to foreign works, we are free to say that the revision of Dr. Atlee has been in this instance a good service.

One of the most important improvements recently made in surgical science is the invention and practical application of the Ophthalmoscope. We have spoken of this ingenious instrument, but its use is so well understood by the best writers and oculists of the day, that our readers will be glad of the following regular account of the instrument, its diagnostic value and mode of use, which we take from the introductory chapter:

> "The ophthalmoscope in its original form, as invented by Dr. Helmholtz, of Königsburg, consists of a reflector, composed of four plates of glass laid one over the other, which are disposed posed at such an inclination as to throw the light from the flame into the eye. The observer's eye looks through this reflector into the patient's eye in the same direction as that in which the light is thrown into it. As the rays of light reflected from the illuminated retina of the patient are, after leaving his eye, somewhat converged, it is necessary that they be rendered divergent before entering the observer's eye, in order that they may come to a focus on his retina. This is effected by the interposition of a concave lens between the observer's eye and the reflecting plates.
>
> "Modifications and improvements of Helmholtz's principle are to be found in the ophthalmoscopes of Follin and Nachet, of Coccius, of Donders and Epkens, and of Meyerstein.
>
> "In the ophthalmoscopes just referred to, the reflection is effected

by plane surfaces, on which, however, except
is condensed by a convex lens. In the opl
noticed, the reflection of the light is effect
whereby its concentration is at the same tim
is a diagram of Ruete's ophthalmoscope.
reflected by the concave mirror A B (of 10 i

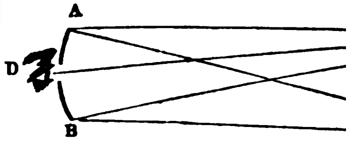

Figure 1.

of convergence on a convex lens C, in front
this the rays are so much more converge
refraction they undergo on entering the eye,
focus, cross and fall in a state of great dis
that this is extensively illuminated. The
through a hole in the middle of the convex

"The ophthalmoscope of Ulrich is const
but is more compactly arranged.

"Anagnostakis's ophthalmoscope is me
(four and a half inches focus).

"Jaeger's ophthalmoscope, which appear
convenient, may be adjusted with either a pl
on Helmholtz's or Ruete's principle.

"The use of the ophthalmoscope is necess
city of the eye to bear the light. [The opht
mode of using the instrument, require more
given. The pupil of a healthy eye always
or, in other words, none of the rays of light
rior chambers of the eye, are reflected in suc
tible to the eye of the observer. The reason
the choroid pigment, the obscurity of the
above all, the refractive properties of the tiss
a stream of light is thrown into the eye so as
are reflected from the retina, and they retu
same tissues, and undergoing the same refra
convergence at the spot whence they ema
candle is used to illuminate the eye, we ca
illumination, because the flame is in the focu
our eye can not be there too, nor can it see
behind it. By using, however, a mirror t
into the eye, and which is pierced with a hol
observer can be applied, and thus be in the
difficulty is overcome.

"To use the instrument the room should l
pupil of the eye to be examined should be

the observer are to sit opposite to one another, the head of the latter being two or three inches higher than that of the former. A lamp—an argand burner, sliding on a vertical rod, is the best—is placed as near to the side of the patient's head as possible, and a little posteriorly, so that the rays of light may not strike the eye. The light is placed near to the eye, because, if at a distance, the mirror, in order to throw the rays into the patient's eye, would have to be held so obliquely that the diameter of the hole through which the observer is to look would be much lessened. The preceding figure (Fig. 2) illustrates the proper mode of making an ophthalmoscopic examination.—Ed.]

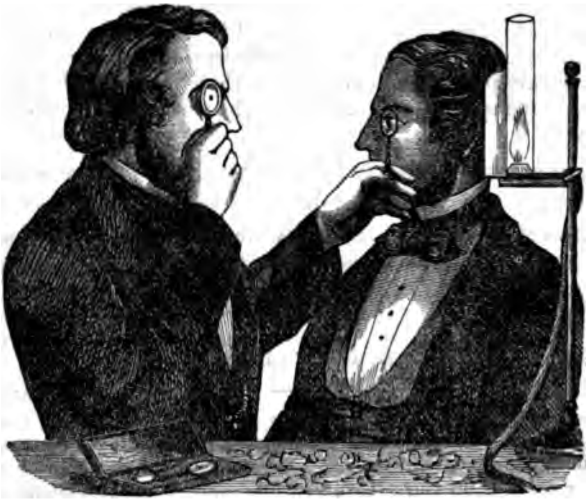

Figure 2.

"For the examination of the eyes in children, especially when affected with intolerance of light and blepharospasmus, considerable management is required, and even some degree of gentle force.

"The surgeon is to seat himself on a chair, with a towel folded longways, laid across his knees. On another chair, on the surgeon's left hand, and a little in front of him, the nurse, with the child, sits in such a way that when she lays the child across her lap, its head may be received on the towel, and between the knees of the surgeon, and thus held steadily. The nurse now confines the arms and hands of the child, whilst the surgeon, having dried the eyelids with a soft linen cloth, proceeds to separate them by applying the point of the forefinger of one hand to the border of the upper eyelid, and the point of the thumb of the other hand to the border of the lower, and then sliding them against the eyeball, but without pressing on it, towards their respective orbital edges. This mode of proceeding obviates the eversion of the eyelids, which is so apt to take place under the cir-

cumstances. The eyelids being thus opene
during the examination, by the comman
finger and thumb, resting against the edge
borders.

"By this means the whole front of the
often happens that, to avoid the light, the
up, so that the cornea is in a great measure
few seconds, however, enough of it will in
enable the surgeon to judge of the state in
completed this part of the exploration, the
so everting the eyelids, as to ascertain the
junctiva."

We can not enter into a full or just revi
one before us. It is sufficient that we not
the science of Ophthalmology to its presen
this edition of his book is very much imp
important respects, and will serve as a saf
general practitioner.

For sale by Robt. Clarke & Co. Price

Mental Hygiene: By I. RAY, M.D. "Health of m
only productive in itself of a greater sum o
other sources, but is the only condition of ou
ble of receiving pleasure from without."—S
Ticknor & Fields. 1863.

Dr. Ray has produced just such a book
his well trained mind and large experience.
part of it with attention and interest, and t
ly devoted to medicine, or to general cultur
perusal.

Chapter I. considers mental hygiene as
tions. Dr. Ray clearly and manifestly reg
mind as dependent on a healthy condition o
at once the materialistic difficulties which
views, but he boldly philosophizes on fac
so truth is reached it matters but little what
says: "The people who have no difficulty
between the health of the lungs and the
around them, or between the health of the
food they are expected to elaborate, utterly ig
the hygienic condition of the brain and the
upon it."

Whether the mind is an independent spi
dividual, or whether it is merely a brain m

not seem clearly to decide. We suppose neither our author nor any one else will ever decide that question. The relations of the mind and body are entirely too subtile for us with our present knowledge to determine. Nevertheless their speculation is one of the most interesting upon which we can engage.

Chapter II. regards mental hygiene as affected by physical influences. This chapter takes up systematically the various influences which may give character to mental attributes or affect them more or less unfavorably. Thus vicious air will depress the brain. Some climates produce irritability. For instance, some writers suppose the restless, impulsive temperament of the American is attributable to climatic influence. Food, drink, sleep, excessive mental labor, etc., are topics considered with force and fitness.

Chapter III. treats of mental hygiene as affected by mental conditions and influences. The true end of all mental cultivation and discipline is to bring up all the powers or attributes of the mind to a degree of unity or harmony; hence a partial cultivation of those powers is to be deprecated and avoided. Our author proceeds to illustrate ill balanced minds, and the bad effects of imperfectly and excessively developed traits of mental character.

Chapter IV. is concerning mental hygiene as affected by the practices of the times. And

Chapter V. is on mental hygiene as affected by tendency to disease. For instance, the predisposition to mental disease is liable to be developed by bodily ailments; and of course when such tendency to mental disease is foreseen, that conduct of life most likely to prevent such development must be a matter of the deepest interest and concern.

We are pleased to notice the impressive manner Dr. Ray treats of the physical education and mental training of children. There is, undoubtedly, a tendency in our systems of education to cram our children in a way that is terribly prone to break down the system and prostrate the mental energies, even if there be no more fatal result.

We can not follow the author of this little volume more in detail at present. We therefore simply repeat the pleasure we have taken in its perusal, and our hearty commendation of it to our readers.

For sale by Rickey & Carroll. Price $1.25.

Pamphlets Received.—"Medical Communications of the Massachusetts Medical Society; being Vol. x., No iii., 1863." The Part before us is mostly occupied with the able Annual Address of Dr. Morrill Wyman, of Cambridge, on the "Reality and Certainty of Medicine."

Then follow brief obituaries of deceased mem the Part is taken up with proceedings, and v chiefly of interest to the members.

"A Case of Neuroma of the Optic Nerve lustrations. By John A. Lidell, M.D., Surge of Anatomy in the National Medical College.

"Relations of the War to Medical Science. delivered before the West Chester County (June 16, 1863. By Dr. J. F. Jenkins, Presi

"Illustrated Catalogue of Medical, Surgic cations."—This is a new catalogue of the known house, so largely engaged in publishin list of standard works would alone constit satisfactory medical library, and this their mens of illustrations, excerpts from book noti ous medical journals, forms quite an attractiv

Editor's Tabl

Another Year.—With the issue of this n *Observer* another year of journal labor has ent procession into the dead past. When we a shall have entered joyously and cheerfully, of another year. It is a time for retrospecti cumstances which surround us seem to rende we briefly review some of the past experience and civil war, as they have borne upon the fo Our readers will be interested in a candid sta historical matters.

Three years ago we had a circulation in eve Union. Our position so near the border gav pathies and associations running out far beyo Dixon. It will be easy to understand, then, future of our journal, when within a few w of our mail list swept away at a single dash- same time not only the subscription list o States, but at the same time many border

Kentucky and Missouri. This was the first step in our troubles. Following at once on the heels of the outbreak of the great rebellion, was the complete and thorough embarrassment of the financial affairs of the country. Every man felt the vital necessity of retrenchment. Medical journals became luxuries, and many old readers of the *Lancet and Observer* discontinued for the time being, on grounds of economy. We were not the only ones to suffer. A majority of the best conducted medical periodicals in America were swept away by the blasting storm. Three years ago we had nearly forty medical exchanges, including those of the South; to-day we have a dozen in all. These financial troubles were our next great journalistic embarrassment. While we were endeavoring to trim our sails for these stormy days, and were fondly hoping that a rigid economy and prudent management of all our affairs would enable us to outride the troublous times, next came the reaction of speculation: prices of everything began to rule high, paper that commanded twelve cents a pound ran up to twenty, labor became scarce and all kinds of printing material and work advanced in proportionate rates. It is not necessary to continue the history. We have said enough to show our readers the series of embarrassments we have passed through, and yet we are alive, and we are happy to say in *good health.* The heavy loss on our subscription list three years ago is nearly replaced, and during all the past year our list has been constantly and steadily on the increase. Never since our connection with this journal has there been so great a degree of promptness in payments, and were it not for the heavy advance in the cost of materials and every thing connected with book publishing, we could truly say that the pecuniary affairs of this journal were never in a more prosperous condition.

Having then, as we believe, by our own care, patience and energy, outrode the embarrassments that should in reason have overwhelmed us, we feel a cheerful, hearty confidence in appealing to our friends for fresh and determined effort in our behalf for a new year. *Shall we have your aid?* The regular monthly issues of the *Lancet and Observer* is our warrant that we have not allowed any embarrassments to materially interfere with our plans, or to cripple our pages. The past will be our earnest of the future. *Is this sufficient promise—we will do better if we can.* We know very well that we abundantly afford the worth of our charge, and now in all seriousness we ask a heavy increase in our subscription list. To this end we respectfully ask each subscriber to make an effort at once in our behalf. Let us know before our next number goes into the hands of the printer if we shall increase our issue, and have a subscription list for 1864 that shall place us out beyond all possibility of embarrassment or doubt.

The Vaccinator.—This is the name of a new instrument which Mr. W. J. M. Gordon, of this city, is introducing to the notice of the profession. Quite a number of our physicians have tried it, and every one is greatly pleased with the ingenious instrument. It is constructed as an ordinary spring lancet, except that the blade terminates in a tubal point. For operating, the fresh scab is prepared in the usual manner, being reduced with a sufficient quantity of water to the consistence of lymph; the tubal point is then charged with a small quantity of the lymph thus prepared; the instrument is set just as you would the spring lancet, and the force of the spring carries the point through the tissue, depositing the vaccine virus just beneath the skin. No blood escapes, no plaster is required, the operation is instantaneous, and no unpleasant or frightful anticipation is produced in the mind of the child. Take it altogether, it is an exceedingly convenient and ingenious affair. The instrument, together with a small vial for carrying water, and a glass plate, are all enclosed in a neat box. The price is $3.00.

Medical Schools.—Every where, so far as we hear, the medical schools of our country are entering upon a prosperous winter. In this city there is an unusually large number of students already in attendance. The amphitheatre of the Commercial Hospital is crowded at all the cliniques. There are between four and five hundred students at each of the old schools of Philadelphia, and we have a like report from the schools at New York city. The Bellevue Hospital Medical College will, we learn, have a class of about three hundred, which is a fine compliment to the energy of this young institution.

The Ambulance System of the Federal Army.—A movement has been inaugurated by the leading Boston physicians, urging upon Congress the investigation of our American system of army ambulances, and praying for the enactment of a law which shall provide for a better system which shall have uniformity and efficacy. Dr. Bowditch, of Boston, has been a deeply and painfully interested mover in this enterprise—the death of his son, Lieut. Bowditch, shot at Centerville, having been hastened, as he feels, and at any rate his sufferings terribly aggravated, by the want of proper ambulance conveyance on that battle-field. There is, undoubtedly, a terrible deficiency in this respect, for which somebody is grossly responsible. As a people, we are too careless of human life; and it is "the great duty of Congress to thoroughly investigate this subject, and convince the public that the care of the Government is thoughtfully and humanely extended to those brave sons who are risking limb and life to sustain it." In the army of the Potomac, while under the command of Gen. McClellan, a system was perfected to some extent by Surgeon Letterman, and promptly promulgated by order of the Commanding General, but we have no information as to how far it was carried out. Medical men will do a good service in agitating this subject, and procuring signatures amongst their neighbors to a petition to Congress, of which the following will serve as a form:

"*Petition for an Ambulance and Hospital System in the Armies of the Republic.*

"To the Honorable Senate and House of Representatives, in Congress assembled:

"The undersigned, —— of ——, in the State of ——, respectfully request your honorable body to pass a law providing for a uniform Ambulance and Hospital System for the armies of the United States."

Belladonna and Sulphate of Zinc in Whooping Cough.—M. Garraway contributes to the *London Lancet* his experience with belladonna and sulphate of zinc in the treatment of whooping cough in fifty cases. He reports most excellent results, the cough being brought under control or entirely arrested in periods varying from one to three weeks. His mode of administration and some interesting observations on the effects of the remedies, are given in the following paragraphs:

"The mode of administering the belladonna was in the form of extract, either diffused in water with the sulphate of zinc and sufficient syrup to make it agreeable to young children, or to those who were old enough and preferred it in the form of pills—the dose being from one-sixth to one-fourth of a grain of the extract, and one-half to a grain of the zinc, three or four times a day, steadily increasing the amount, till at the end of three weeks children of five or six years old would be taking from four to six grains of belladonna, and twice that quantity of sulphate of zinc, daily.

"So far as my investigation went, it would appear that both the tolerance of the remedy and the speedy subsidence of the disorder were in inverse proportion to the age of the subject—a child eight or ten weeks old bearing a much larger proportionate dose than one of eight or ten years, and manifesting a much more rapid improvement. In this I find I am in accord with other observers.

"Dilation of the pupils and indistinctness of vision commonly came on after a few days. When these effects manifested themselves

the dose was diminished somewhat; but
Fuller of St. George's Hospital, whose
ical effects of belladonna has been cons
injury ever resulted from this condition,
to interfere with the general line of treat

"In two cases more decided symptom
a little girl of six, who had reached the
and whose pupils had been dilated mor
child became one day, as her parents
wrong messages, gave inapt answers, as
sisters when they were present, and talk
ulous manner. This state quite passed
tinuing the medicines.

"The other was that of a delicate litt
attained to four grains a day. I was ca
the great alarm of her parents. She ha
erate mirthfulness and excitement duri
put to bed could not be quiet, and at len
calling for her mamma and nurse, of w
scions, picking at the bed-clothes, seein
presenting a train of symptoms very an
delirium tremens in the adult. This st
four hours of refreshing sleep, such as t
for many nights. On awaking she was
that hour the improvement was remarka
I suspended the remedy for a day, and
ished doses."

Personal.—The old Eighth Regime
camp near Mountain Run, Virginia.
consists of Surgeon J. L. Brenton, Alli
Surgeon F. A. Tuttle, Plymouth, Ohio
S. Pollock, Kenton, Ohio.

A Word to Subscribers in Arrears.—
expense of publishing this journal, we
subscribers of the absolute necessity of
their annual subscriptions. We shall st
down to the established rate of $2.00
But no one these times who allows his a
expect us to accept those rates. We w
sistent, but we must in justice to ourselv
$2.00 *in advance, otherwise* $3.00. Tho
at once, and let us begin the new ye
remitting be careful to solicit your neig
We anticipate a large increase to our lis

New Books.—In our last number we took occasion to notice some new books, or new editions of old books, as in the press. We note since that a new edition of Bedford's great book on Obstetrics as already issued, and the Messrs. Baillière announce a new edition of Prof. Hamilton's Military Surgery as "in active course of preparation," to embody his recent army experience.

Dr. Martin's Case of Recto-Vaginal Laceration.—Too late to incorporate with Dr. Martin's article, we have received a note from the Doctor, saying that "The patient continues well, four months after the operation. Her babe has died, and there is a return of the catamenia."

Personal.—Dr. P. G. Fore of this city, one of our oldest and most highly esteemed physicians, has gone to Europe on a trip of health and recreation. Dr. Fore has been steadily in the harness of professional duty for many years, and we are pleased to see him willing to break through the many ties that have accumulated in that time, and give to himself a respite from his established drudgery. We shall hope to hear from him now and then in his journeyings.

The Journal of Psychological Medicine, which was established in 1848 by Dr. Forbes Winslow, and has since then appeared under his able editorship, is to be discontinued—at least, in its present form. In an amiable and kindly spirit, Dr. Winslow lays down the editorial *baton*, which he has so long wielded to the satisfaction of his numerous readers.—*Brit. Med. Journal.*

To Medical Gents.—In view of the subordinate rank of medical officers in our Army and Navy, the following squib from *Punch* is applicable in this latitude as well as London:

"WANTED, a considerable number of Clever Young Snobs to compete for the commission of surgeon in the army, for which there is at present, and has been for some time, an extreme scarcity of eligible candidates, owing to the circumstance that men of education and ability sufficient to qualify them for the office, refuse to accept it, unless upon the impossible condition of being treated as gentlemen. All applicants must be fellows of the Royal College of Surgeons and Doctors of Medicine who have received diplomas recognized under the Medical Registration Act. In addition to their professional qualifications, they must possess a capability of being continually and contentedly snubbed, and patiently submitting to any amount of insult. They will be required at the mess-table to occupy a position subordinate to that of every combatant officer, even the youngest ensign, whose permission it will be necessary for them to ask for the

purpose of giving the attendants any kind o
essary for them to be regardless of those p
ably inflicted by junior officers on their i
riors in age and attainments. No thin-s
with any respect whatever, or animated i
feelings of a gentleman, need apply. For
may be made at Head-quarters.

"Horse Guards, March 25, 1863."

Resignation of Prof. H. H. Childs.—At
of the Berkshire Medical College, Henry H
dent of the institution, as well as its founde
Professorship of "Obstetrics and the Dise
dren," which he has held so many years.
has been the active head of the Berkshire
fulness having extended to a period almos
these years, by his energy, zeal and enth
widespread reputation as a medical man, an
and courtesy of manner, a no less deserved
tleman.—*Amer. Med. Times.*

Applications for Artificial Limbs.—The
to any of the Department Medical Directo
the correctness of the claim, will order a li
facturers who are authorized to supply such
the manufacturer is left to the applicant.

Proof must be enclosed that the applica
the time of losing the limb, and that the l
duty. This proof, if he is still in service,
from the commanding officer, surgeon-in-ch
officer personally cognizant of the facts i
from the service, his discharge papers must
nation, with his own affidavit of the tim
losing the limb, and, if possible, the certi
manding officer, or surgeon-in-charge.

The discharge papers will be returned to

Instructions as to the measurement of th
by the manufacturer to the applicant.

Soldiers are not allowed to purchase an
ceive the commutation value thereof in mo
so expended be refunded out of the Govern

Commissioned officers are not entitled to
sion made by Congress for supplying "Arti

The following are the manufacturers who
limbs:—Douglas Bly, New York, Rocheste
Hudson, New York; Frank B. Palmer, New
B. W. Jewett, Washington, D. C.; Chas.
Gildea, Philadelphia.

The following are the stations of the vari whom the applications should be made: New York City, Surgeon C. McDougall, U.S.A.; Philadelphia, Phila., J. Campbell, U.S.A.; Baltimore, Md., Jos. Simpson, U.S.A.; Washington, D. C., R. O. Abbott, U.S.A.; Cincinnati, Ohio, W. S. King, U.S.A.; Chicago, Ill., J. B. Porter, U.S.A.; St Louis, Mo., M. Mills, U.S.A.; New Orleans, La., R. H. Alexander, U.S.A.; Louisville, Kentucky, G. G. Shumard, U.S.A.

Retreat for Intemperate Women.—We take the following from a recent number of the *Boston Medical and Surgical Journal.* Its subject commends itself without comment to the consideration of a profession ever first in deeds of charity and good will:

The subject of the following communication is one the importance of which can hardly be exaggerated. The unfortunate victims of the vice to which it refers are among the most pitiable objects to which our professional sympathies are ever directed. The experience of nearly every physician must have furnished him with cases of this kind, of the most embarrassing character. Household restraints and home influence are little better than worthless in these cases, and the prospect of an asylum where they can be received and tenderly cared for will bring an indescribable relief to many. We have no means of knowing how extensive a provision is required for the purpose in our own State, but we hail the commencement of this movement with the greatest satisfaction, and hope it may meet with the signal success which it deserves.

"RETREAT FOR INTEMPERATE WOMEN.—The necessity of making some special provision for the victims of intemperance, partly for the benefit of the individual and partly for that of the community, is beginning to attract general attention, and the subject in its various bearings has been brought before the Massachusetts State Board of Commissioners on Insanity as among the matters deserving their serious consideration.

"Aside from the question of establishing a public asylum for inebriates, the advantages of which would more naturally be confined to the middle and lower classes, it appears there is as yet in New England no place of refuge for women of social position except the public and private lunatic asylums, which are unfitted, in the almost unanimous opinion of their superintendents, for the reception of such cases; at many asylums, indeed, admittance being refused to them alike in justice to the other patients and to the inebriates themselves. The number of applications at the New York General Asylum at Binghampton far exceeds the possible capacity of the building, while the Washingtonian Home in Boston, whose influence for good is already so extended, is for men alone.

"In accordance with this apparent want, arrangements have been made by which there will be afforded to a limited number of self-indulgent women, whether addicted to opiates or stimulants, the necessary elements for their cure; namely, voluntary exclusion from

temptation, the strictest privacy if desired,
diate vicinity of the city, and yet unrivalled
and beauty of scenery. The house selected
constructed with especial reference to a comfo
winter; attendants will be provided of une
but few patients will at present be received.
application may be made to the Secretary of
Storer, at Hotel Pelham, Boston; the other
being Hon. Josiah Quincy, Jr., of Boston,
of the Governor's Council, of Fitchburg.
step now taken has the cordial approval and
cellency Governor Andrew, Judge Hoar of
James Jackson, Jacob Bigelow, John Jeff
Mason Warren, Tyler of the Asylum at S
chester, and other of our prominent citizens.'
Journal.

Joseph Hyrtl, the Anatomist of the Vien
amphitheatre of the anatomical departme
school, in the Austrian capital, Vienna,
Prof. Hyrtl's demonstrations of Topographic
lecture was at an early hour, for a winter m
seven. The lecturer came in, dressed in
main features of which were a soiled mor
without a collar, and pushing up his larg
with some humorous remark, exciting a ro
after which he would go seriously to work,
and a half many a good joke would be mad

There is not that profuse pictorial illustr
to anatomical demonstrations in America, b
nigh more than compensates for it: that
kept covered with striking diagrams, draw
rapid hand, turning his head half around w
audience be satisfied with the delineation.

Nearly all the German teachers whom I
use of the blackboard to a much greater ext
our instructors, and these pictures, with t
monstrator, have an effect only to be imperf
who have not been taught by them. Hyrtl'
displayed in his lectures, are not without the
an eminent teacher speak of him as a "pla
may, he holds large classes, whilst Rokita
fame, has scarcely a dozen to hear his monot
long since given to the public.

Joseph Hyrtl, one of the professors of
University of Vienna, was born in Hunga
elected Professor of Anatomy in the famous
where he remained until called to the Chair

His great improvements have been in his
arations, and those illustrating some points

especially that of the internal ear, and in his published works, which are widely known and appreciated. These last are as follows: *Handbook of the Topographical Anatomy of the Human Body. A Text-Book of Human Anatomy. Comparative Anatomicol Examinations of the Inner Ear of Man and the Mammalia;* with some other works of less importance.

Prof. Hyrtl did much to form the anatomical museums in Prague and Vienna, besides making a very large private collection, which was destroyed by soldiers, with his house, in 1848. While Dr. Hyrtl was assisting in the hospital in care of the wounded, this was done. He returned home to find his private effects, with the result of his scientific labors, entirely destroyed. Referring to this, he said: "On seeing the ruins I went to a neighbor to borrow a shirt to replace mine soiled with blood, and a handkerchief with which to weep:"—not quite as philosophic as Sir Isaac Newton, when the dog Diamond had destroyed the calculations of years.

The Professor has, however, a new collection, made since 1848, consisting mostly of the skeletons of fishes. This is very large, filling two large rooms, and coming from all parts of the world. He has also a large collection of the *ossicula auditus* of the mammalia, that is probably the most complete in the world, for which he obtained a medal at the last London Exhibition. They are arranged on blackboards, and possess the highest interest to the student of comparative anatomy. One of these collections was purchased for a museum in London, the Hunterian, I believe. The Professor practised surgery for a little time, but gave it up in disgust to go back to his anatomical studies, after having amputated the leg and thigh successively in a case of malignant disease, and seeing it return in the hip-joint. Hyrtl is a very industrious man, spending his days in dissections in a dirty little room just back of the amphitheatre, with a text-book of anatomy before him. I found him one day, with Gray, thus lying near the infant cadaver, which he was at work upon. In person he is tall and well formed, pleasing in speech, and his writings are characterized by originality and humor, combined with lucid expression.—D. B. St. J. R., in *Am. Med. Times.*

To Let.—A poor invalid gentleman, very much reduced, lately read in a medical paper something about "letting blood" The unhappy weakly creature writes to us to know if we can inform him "who lets it," and whether he can on moderate terms hire some for a few years. We refer him to The Lancet.—*Punch.*

New England Humanity.—The New York and Boston Express Mail Line railroad, via Hartford and Springfield, have placed upon their road a set of cars for soldiers' use only. The car contains ten cots, suspended by rubber bands, for those having broken limbs, etc., also seat room for thirty, with handsomely cushioned seats, several easy chairs, a full set of appliances to protect fractured or broken limbs, a complete set of medicines, bandages, lint, etc., a splendid cop-

per urn and apparatus for making coffee, a
heaters, etc. ; in fact everything needed for
is here placed at his disposal. A steward
car, whose duties are to minister to the wan
of these cars will leave New York and Bost

—o-o—

Army Medical Intellige

So much of Special Orders No. 319, S
quarters, Department of the Mississippi, as
Surgeon Rainer Schallern, 58th Ohio Vols.,
has been revoked, and he is honorably dis
United States, to date September 17, 1862,
factory evidence that he was properly abse
the date at which he returned to his regim
performed service up to September 17, 18
received the order mustering him out of ser

Assistant-Surgeon John Everhart, 12th K
charged the service of the United States, he
before a Medical Board of Examination ap
qualifications as a Medical Officer.

So much of Special Orders No. 478, Wa
Surgeon H. S. Hewitt, U.S.V., to report
Director, Department of the Tennessee, has
at once report in person to the Medical Di
Cumberland, for duty.

Surgeon M. Goldsmith, U.S.V., has been
eral Hammond to visit the General Hospitals
Philadelphia, and Washington, with a view
report on hospital gangrene, which has been
Surgeon G. in the hospitals at Louisville, K

So much of Special Orders No. 406, Sep
Adjutant-General's Office, as discharged
Babcock, 2d Kentucky Volunteers, on acco
and for absence without leave, has been so
charge of absence without leave, he having
dence that he was absent with proper authori

By direction of the President, Surgeon W
honorably discharged the service of the Uni
with General Orders No. 100, August 11,
partment.

Surgeon Joseph R. Smith, U.S.A., has
Ark., and has relieved Surgeon J. C. Whit
Director of the Army of Arkansas.

A Board of Officers, to consist of Lieut.-
Medical Inspector, U.S.A., and Lieut.-Colon
valid Corps, is hereby constituted for the

convalescent patients and enlisted men on duty in General Hospitals and Convalescent Camps, for the purpose of organizing the Invalid Corps, and of designating to the Surgeon-in-charge those men who are fit for duty or proper subjects of discharge, in accordance with General Orders No. 308, War Department, 1863. In performance of this duty the Board will visit such General Hospitals and Convalescent Camps as the Provost-Marshal-General may from time to time direct, and will be governed by his orders and instructions.

Surgeon H. S. Hewitt, U.S.A., has been ordered to proceed without delay to Nashville, Tenn., and report in person to the Medical Director, Department of the Tennessee, for duty.

By direction of the President, Assistant-Surgeon G. McFarland, 7th Illinois Volunteers, has been dismissed the service of the United States.

The resignation of Surgeons Wm. H. Church and J. H. Wythes, U.S.V., have been accepted by the President, to take effect October 26, 1863.

Surgeon John C. Dalton, U.S.V., has been assigned to duty as attending Surgeon on sick and wounded officers of Volunteeers, and as Medical Director of Transportation in New York city.

Medical Purveyors have been ordered not to pay contract physicians upon termination of contract, until they present a notification from the Surgeon-General's Office of the final settlement of their accounts.

General Orders, No. 31.

Headquarters District of Ohio, Cincinnati, Oct. 31st, 1863.

I. Major J. T. Carpenter, Surgeon U. S. Volunteers, is hereby announced as Medical Director of this District, in place of Surgeon W. W. Holmes, who leaves the service on account of failing health.

II. In taking leave of Surgeon Holmes, the Commanding General desires to recognize the high qualities as Surgeon and administrative officer, which he has displayed during continuous arduous labors, dating from the beginning of the war. Both in the field and in the Medical Director's Office, Surgeon Holmes has won high honors in the discharge of duty, and his necessary retirement from the Army is felt as a real loss to the service.

By command of Brig. Gen'l J. D. Cox.

G. M. Bascom, Major and Assist. Adj't. General.

General Orders, No. 351.

War Department, Adjutant General's Office,
Washington, D. C., Oct. 29, 1863.

The employment of women in the U. S. General Hospitals will in future be strictly governed by the following rules :

1. Persons approved by Miss Dix, or her certified agents, will receive from her, or them, "certificates of approval," which must be countersigned by Medical Directors upon their assignment to duty as nurses within their Departments.

2. Assignments of "women nurses" to d
will only be made upon application by the su
the Medical Directors, to Miss Dix or her ag
quire, not exceeding one to every thirty bed

3. No females, except Hospital Matrons,
eral Hospitals, or, after December 31, 1863
and Pay-rolls, without such certificate of app
ment, unless specially appointed by the Sur

4. Women nurses, while on duty in Gene
the exclusive control of the senior medical
their several duties, and may be discharged
supernumerary, or for incompetency, insubo
his orders. Such discharge, with the reason
upon the certificate, will be at once returned

By order of the Secretary of War:

F. D. Townsen

Special Selecti

The Battle of Gettysb

[From a Correspondent of the "London Medical

Near Getty

Since my last communication to you was
the Army of the Potomac have been kept s
has since then marched northwards through n
Maryland, into Pennsylvania, fought the ba
now again in sight of the river from which
the march I have not much to say. On one
would be all we would get over. On anothe
thirty weary miles were counted. At one
clear— not a cloud in all the heavens to sh
influence of the terrible rays thrown verticall
summer sun—while the clouds of dust that n
nearly stifled him, panting as he already wa
and the oppressive heat. Many complaints
ical officers of faintness, giddiness, flutte
feeling of an impending something, which
more or less severe, which was sure to occur
utes' rest in the shade, and an ounce or tw
of that a drachm of aromatic spirits of a
adopt some precaution against sun-stroke—a
of white cloth or silk, a handful of leaves
head every half hour from the canteen. A

filled with cumulus clouds, every now and again the thunder rolling over head, and following closely the vivid pinkish flash, while the rain pours down in torrents, drenching the soldier to the skin, however tightly he might draw his rubber cloak around him, increasing so the load he has to carry by many pounds; the mud increases in quantity at every step; brooks innumerable, which previously had no existence, have to be crossed. Sandy particles get into the shoes, and chafe the feet, so that the poor fellows can not say which is the lesser evil—heat and dust, or rain and mud.

It is surprising how very few the cases were of disease developed on the march. Some of sun-stroke and a few of febricula. The men who fell out of the line of march, and straggled behind, were simply footsore, or, if toward the end of a long or hurried march, exhausted.

The fighting in this vicinity, which has resulted so gloriously for the previously much vaunted and much maligned army of the Potomac, began upon July 1, the First and part of the Eleventh Corps having, unsupported, to bear the brunt of the day's battle, which ended in the death of Reynolds and the falling back of his troops to the hilly ground to the south of the little town of Gettysburg, leaving many of his wounded to fall in the hands of the enemy; who, however, three days subsequently, was obliged to abandon them on his retreat. On the evening of this day, by forced marching, most of Meade's army was concentrated at this place, and early on the following morning his dispositions were made. It was not, however, until some time after noon that the battle was resumed. The troops having been drawn up in line of bttle, the surgeons of divisions with their hospital staffs proceeded to the rear of the lines in order to choose an eligible site and to prepare for the reception of the wounded. Our position was in the form of a triangle, two sides of which, formed of fighting men, were presented to the enemy, the area enclosed by them being covered with Hospitals, ambulance wagons, and supply wagons. Unfortunately, however, the guns of the enemy commanded the whole of this triangular space, and, when the battle commenced, the Surgeons found it necessary to escape beyond the base. The first patient attended to in the Hospital to which your correspondent is attached was one of the attendants, who, in carrying a bucketful of water to an operating table, had two of his fingers torn off by a splinter from a shell.. Everything was packed up speedily, and a general skedaddle of Surgeons took place; rather less than half a mile, however, placed us out of immediate danger, and, the tables being re-arranged, the work commenced. Half an hour after we were established, patients were not wanting, hundreds lay around us on the ground awaiting in patience their turn for attention, or moaning piteously for the doctor. It grew dark. The Surgeons labored earnestly. A pile of limbs was at the foot of every table, yet those demanding attention increased. Sperm candles were lighted, and the work went on. A case is brought to the table. It is one where the necessity for operation is perceived at a glance; where there are so many to pick amongst it would be time lost to discuss ambiguous cases. Chloroform is rapidly administered to get over the excitant stage of

its action, and the operator proceeds—and s
night, without intermission, without remissio
Just as the light of the morn began to r
the storm of battle was resumed. Good ne
the course of a few hours—"The enemy ha
assault. Our artillery is doing fearful servi
coming in." To a wounded man news of t
cordials that can be administered. The an
nance wore off, jokes and laughs could b
the heavy cannonading then going on, whic
viously such exclamations as "My God! is
forth now such remarks as "That's right, bo
it in hot and heavy." I am not prepared t
this alteration in the feeling of the wounded w
a pure feeling of joy at the success of their
certain that the majority viewed the news o
more selfish eye. If defeated, what had the
His friends and comrades would fall back, a
hind to run the chances of lying on the batt
tide of battle swept over it, and consequentl
the enemy, who, with few supplies, and ple
to care for, would, could give but little time
vation of his limb or life. Victory, on th
chance that skillful Surgery and careful nur
Shortly after this a battery was to be plan
neighborhood, and we were ordered to move
way, since if the enemy should reply to it
fire. A second time we had to pack up, load
move off to another location, well to the rear
with us most of the wounded that we had to
The greater part of the day was lost in tra
operations only were performed at the new
coming on, the Surgeons lay down to enjoy
At daylight upon the 4th of July the labo
continued until the afternoon, when a heavy t
the proceedings until the fly of a hospital-tent
the operating tables. During all this sever
lay as they had been set down from the am
had one blanket to spread beneath them, an
cover them, for two or three ambulance had
to pick up blankets. The ground on which
converted into mud six inches deep, and the
blood, and filth of all sorts, they lay for h
of them at least; for some of those but slig
with their accommodations, went off to find
Philadelphia, intending to show their wound
a few Hospital tents and flies were pitched to
operated upon. Again, some small shelter-t
field, and pitched over some of the wounded
a great many—of the 800 Federal and 25

division Hospital lay so for five or six days, not one of which passed without heavy falls of rain. Their wounds, indeed, were kept clean, since there was no lack of stragglers to attend to them, and a small allowance of beef-tea and bread was given to each ; yet, after no battle on the desolated soil of Virginia did the wounded suffer more than after the Gettysburg battle in Pennsylvania. This, due in part to the inclemency of the weather, was chiefly caused by the movements of the army in pursuit of the enemy. Five Surgeons were left behind with the wounded of a division as an operating staff; all the others had to follow their regiments, and all the supply-wagons had likewise to proceed with the army, because another great battle was imminent, and everything would be required. The Gettysburg wounded were left to the care of the country, and nobly did the country respond to the call ; but it took time for the wants of the wounded to be known, and for them to be supplied. The immediate neighborhood of the scene of conflict was unable to do anything, however charitably inclined, since the contending armies, previous to and after the fight, had used up everything eatable for miles around. A large force of volunteer and contract Surgeons was the first assistance that arrived, and, having had certain of the wounded placed under their charge, were soon made useful. But the lint, bandages, chloroform, left with us began to fail. What was to be done ? We looked at each other in dismay, when, lo ! relief was at hand. The supplies of all the different associations of the country poured in upon us *en masse*, and in a trice we found ourselves elevated from a state of destitution to one of luxury. Everything we could wish for the wounded was now at our disposal. We now had a sufficiency of dressing ; we had blankets, shirts, drawers, socks, soft pillows for stumps to rest upon, fans to keep the flies away from those who had strength enough to use them, and musquito-bars for those incapable of doing so. Food we now had fit for sick and wounded men, and brandy, wines, and fruits. Nor was even tobacco forgotten by these kindly associations. A number of ladies connected with them enliven our camps, and do more good as nurses each of them than a dozen men detailed for that purpose. The wounded, the Government, the country, can never sufficiently thank the Sanitary Commission, the Christian Commission, Adam's Express Hospital Corps, and the many other associations which transformed the scene of misery here to one of home-like comfort.

The rebel wounded in our charge have fared, so far as comfort and attention went, as our own men fared. Before our supplies came up they made no complaints, after their arrival they declared they had not had such a gay time since the Confederacy commenced to exist. The Surgeons, in bringing in their cases to the table, never examined previously if a man had blue pants or grey, but looked simply at the nature of the wound. Had they been within their own lines they could not have been so well attended to. I have seen now, Confederate wounded in hands of Federals, and Federal wounded in the hands of the rebels, and I can not but say that in acting the good Samaritan the North bears off the palm. At Chancellorsville battle the rebels removed their wounded to be cared for at Richmond, leaving the 1200

northern wounded to lie upon the field. Th
gave them what help they could, but the rebe
—but confiscate the captured Surgeons' case
looking upon them as Government propert
represented to those in authority, flour, bacon
tifully used to the wounded. This was all,
because it was all they had. Still, they co
could have removed these 1200 men to Rich
wounded, to fare as they fared ; they could
geons from their army at Fredericksburg to
Richmond—only a couple of hours away by
have been sent for them to lie upon. What
the Unionists acted similarly at Gettysburg
own wounded by rail, and left 10,000 rebels
simply hard bread, bacon, sugar, and flour
no surgical assistance, save the dozen medi
over to take care of them ? Had this been do
we would never have heard the end of it.

At this date those who remain in Hospital
upon ; most of the others have been removed.
surgery has been performed, and we, who
daily in expectation of orders to join our com
this communication to you now, because,
I should be more favored with leisure, I mig
the next battle, when Gettysburg would h
past.

Concerning the surgery of this battle, I
atism entered largely into its elements. Sh
the radius ulna, and fibula I have seen resect
resection been resorted to in cases of the
this operation, when well tried at Antietam
prevented any further attempts now. Amp
in the middle and lower thirds ; no operatio

These last have been doing well up to t
ultimately succeed, is an interesting questio
The continued rainy weather that we have ha
system, induced a tendency to sloughing in
obviate which, a little whiskey or turpentin
water-dressing.

An under-average of deaths after operation
a few cases of secondary hæmorrhage, and tw
have been the accidents occurring among us
Two cases of amputation were performed afte
of the muscles of deglutition ; one has since d
was alive thirty-six hours after operation (th
then no tetanic symptoms.

A great many interesting cases of gun-shot
at this battle, and a large number of prep
served and sent to Washington. A Surge

will, when it appears, be a book worth studying, even if the author merely copies *verbatim* from the records of the various Hospitals.

In conclusion, just now I may mention that, though I have seen chloroform administered many a time and oft, yet it was never my fortune to see any approach to a *mesaventure* until lately, and the fruit then lay with a careless administerer, not with the anæsthetic. Artificial respiration was put in practice, and, in five minutes, the pulse, previously imperceptible, was felt to beat gently, at long and irregular intervals, and natural breathing was found to be re-established. The patient has since done well.

Editorial Abstracts and Selections.

1. *Disappearance of Arsenic from the Tissues.*—The case of Lydia Williams, convicted of intent to poison her husband, D. Williams, by the administration of arsenic, has considerable toxicological importance by reason of the difficulties which the case presented in respect to the discovery of the poison, supposed to have been the cause of death. The evidence was somewhat complicated. The dying deposition of the husband was to the effect that each time he partook of food prepared by his wife, in the interval of the 12th and 23d of April, he vomited violently, " after which time," he said, " my daughter prepared my food, through the interference and suggestion of my sister Eleanor, since which time I have not vomited. I saw my wife take something out of a paper, which I believe she took from her pocket, and put it in my food two or three times, and I vomited each time. She was standing by the window in my bedroom the first time, and in the other room afterwards. The first time I became sick and vomited, I had partaken of broth, prepared and given to me by Lydia for my dinner. The sensation I felt at the time, was a burning in my stomach ; my throat was dry, shrunk up, and burning ; my tongue much swollen ; my lips swollen and cracked ; the skin on my body, dry, withered, and peeling off. I make this declaration, believing that I am now dying, and will not recover."

"Mr. W. D. Wathan, of Fishguard, Surgeon, deposed that he was called in to see the deceased, on the 28th of April. He described the symptoms presented by the deceased. There was inflammation and numbness of the limbs, and various other appearances which made him form a decided opinion as to the cause of his death. He believed he died from the effects of an irritant poison. Hog beans act as a tonic, and are very harmless. The package given him by Eleanor Williams contained oxalic acid.

" Dr. J. D. Brown, of Haverfordwest, deposed that he, in company with the last witness, made a post-mortem examination of the deceased.

He appeared to have died of heart sympto
seemed to be exhausted. He could not say
tion.

"Mr. William Harapath, analytical che
receiving a jar, containing portions of the
tendent Jones. He tested its contents fo
There was inflammation in all parts of the
had seen cases where inflammation, procee
had caused death. Any heavy irritant po
effects. Neither in his reading nor experien
son to be found after fifteen days. He h
from Superintendent Jones. One of them
consisted of oatmeal and arsenic. It cont
of arsenious acid, and sixty-three of vegeta
arsenic had been known to cause death; b
Arsenic acts on the nerves, where it has
quantities, and the sufferers die from secon
rience he had never known so long a time
before death ensued."

Under such circumstances it was impossi
the prisoner of the full offence charged; b
the intent,"—was fully justified by the fac
understand why Dr. Brown should have gi
that the patient died from heart-affection, s
clared that all parts of the intestine were i
were such as an irritant poison would prod
was given, and no poison was found, no
—*London Lancet.*

2. *Investigations Touching the Use of Iod*
ant-physician at the Vienna General Hos
Wiener Med. Wochensch., a series of pape
matter touching the therapeutic use of iodi
follows:

1. Large doses of iodide of potassium,
quantity of fluid, remain a long time in
quantity of fluid, they are quickly washed
pass rapidly into the secretions and excr
should be carefully noticed.

2. When iodide of potassium is taken
only in the urine, saliva, and other secreti
evacuations, within from four to seven ho
aqueous or the reverse.

3. In the administration of iodide of i
considerable quantities and found with a
in the urine. Fæcal matter contains muc
of iodine. The same phenomena may be
cury is used.

4. Frictions with an ointment containin
sound skin will cause the iodine to be deta

5. Iodine is found in the urine of those who take baths in which iodide of potassium is dissolved, even when the rectum and urethra are kept free from the action of the bath. This is proved by examining the urine, and by noting a large diminution of the iodine in the water used for the bath.

6. The intestinal mucous membrane takes of the iodine very energetically in the form of enemata, and this is the case even with very weak solutions of iodide of potassium.

7. Large doses of iodide of potassium, or small doses taken for a long time, are not well borne in certain pathological states of the economy ; in fact, large doses of iodine, or concentrated solutions, are very prejudicial to the system.

3. *Subcutaneous Injection of Quinine in Malarious Fever.*—Since the year 1858, when Dr. Wood brought forth the hypodermic mode of administering morphia, the plan has been extensively tried. Moreover, the results following the injection of morphia into the subcutaneous areolar tissue have, on the whole, been satisfactory, and the use of the alkaloid in this manner has now become an established practice in very obstinate neuralgic disorders. Other agents, as atropia, have also been used hypodermically, with varied success, and I have latterly employed a strong solution of quinine for the cure of intermittent and remittent fever, by the method of subcutaneous injection.

The success which has attended the practice, renders me desirous of calling attention to this novel mode of using quinine. I have so employed the remedy in upwards of thirty cases of intermittent fever, and with almost invariable success ; the former class seldom requiring a second application, the latter generally subsiding after the fifth or sixth injection. Since the period I commenced to use quinine in this manner, I have been surprised and pleased to find, in one of the medical periodicals, that the same plan has been pursued by Dr. Chasseaud, of Smyrna, who reports a hundred and fifty cures, and especially recommends the system in fever complicated with gastronomic symptoms, when the exhibition of quinine by the mouth is often "inefficient, difficult, and hazardous."

I use the strongest solution of quinine that can be prepared—viz., thirty grains of quinine, eight or ten grains of diluted sulphuric acid, and half an ounce of water. Of this I inject from half a drachm to a drachm, the former quantity containing some four or five grains of the active agent. With the exception of a little sulphate of soda, if the bowels are confined, I use no other remedies whatever, in uncomplicated cases of any type of malarious fever. When the spleen is enlarged, or if a leucocythemic condition is present, I prescribe, as an additional curative agent, one or the other of the preparations of iron, very frequently the citrate of iron and quinine.

I generally inject beneath the skin, over the outer belly of the triceps extensor muscle, and sometimes over the deltoid. I have, however, used the syringe with equal effect on the thigh and calf, and in cases of enlarged spleen have thought the action of the remedy in-

creased by injecting over that organ. I use
the screw action, and furnished with a sharp
inch in length. The latter is introduced bene
inch or less, and the pain is not greater than
deed, patients have declared they would rath
than taste the bitter of quinine. I have ne
flammation or irritation follow the operation
In one of these this result was due to the
namely, a small trocar and common glass
quinine in *suspension* being used, instead of i
reason to think that quinine in suspension i
and this is what physiology would lead us
that when a fluid material is introduced int
will be absorbed more directly than any soli
fore, to avoid irritation of the parts, and, al
of the syringe (which instrument was pr
insist upon a perfectly clear solution of the

The best time to inject is shortly before th
may be done during the first stage, with t
somewhat stopping the whole paroxysm.
presents at the morning visit, who expects
day, I have injected at the time, and nearly
stopped.

In cases of remittent I have endeavored t
sion, but do not wait for this period. In
should be repeated at intervals of six or eig

I believe four or five grains of quinine i
ument are equal in effect to five or six times
stomach; also, that the effects are more cert
ordinary method; and also, that relapsing
than when the remedy is administered by th
L.R.C.P., in *London Lancet*.

4. ***Removal of a Necrosed Lower Maxilla***
Periosteum and the Reproduction of New
Bologna, has submitted to the Surgical S
necrosis of the lower jaw, from the fumes
fifty-six years, in which the sequestra were re
M. Rizzoli made incisions on either side
thickened periosteum with a spatula from the
the latter piecemeal. The preserved periost
in the place of the portions taken away, whic
part of the ramus on each side. It was, h
the upper part of the ramus and the condyle
portions of bone were also removed through
precautions, and the periosteum again acted i
tually the man was able to use his jaw, and n
of teeth. M. Forget, who reported on the c
that there was nothing new in this action of
of bone, surgeons having long acted upon t

such cases. M. Flourens had pointedly said, "Take away the bone, preserve the periosteum, and the preserved periosteum will restore the bone," but this applies less to cases of necrosis of bone than to cases of experiments on animals and operations performed on healthy bones and periosteum. And even in these cases it should be remembered that osseous substance is reproduced, but not the actual bone as it existed before the resection.—*London Lancet.*

5. *On Fractures.*—There is no subject within the entire range of surgery on which so much has been written and yet so little real practical improvement made as that of fractures. A system so long and perseveringly followed as that on which the present treatment is based, but which has proved so barren of good results, may reasonably be suspected of embracing some radical defect both of principle and practice. It will not be amiss, therefore, to examine one or two of its leading features, for the purpose of discovering the cause and its remedy.

In the first place, with regard to Extension. The views entertained respecting it are so erroneous, that until they are entirely abandoned no improvement can take place. Muscular contraction has been, and still is, the real bugbear. To counteract its supposed baneful influence, or, in other words, to keep up permanent extension, has been the chief object sought to be attained, and no combination of forces the ingenuity of mechanicians could devise has been considered too powerful to attempt its accomplishment. Look, for instance, at the powerful screws attached to the extremities of some instruments—at the railway splint of Professor Dummreicher, some time since used in St. Bartholemew's Hospital, by which the lower part of the splint, supporting and holding in its grasp the lower or separated portion of the limb, is so contrived as to run away with it to the utmost limit of muscular elasticity. Such, too, is the effect of the practice of attaching a heavy weight to a cord from the foot, and letting it run over a pulley at the end of the bedstead. A similar result also follows the application of the most commonly used of all splints—viz., Desault's long splint, and of all ordinary forms of apparatus. Extension, therefore, as at present understood and practised by the above means, is a persistently active, and as such an injurious, force. It can only be beneficial when temporarily employed to effect replacement. As soon as this is accomplished it ought to be superseded by the passive, enduring, and consequently beneficial force expressed by the term Retention.

Now this much dreaded muscular contraction, the involuntary result of fracture, hitherto considered so obstructive, discarded as even worse than useless, and opposed as injurious, is, if rightly understood, a natural power of inestimable value, supplying the exact amount of forcible contact between the broken surfaces necessary to excite healthy reparative action in the most speedy and perfect manner, accurately adjusted to the functional capacity of each individual case. That this view is correct, physiologically, pathologically, and mechanically, will undoubtedly be admitted. At least nine-tenths of the cases of ununited

fracture, of tardy union and deformity, may l
understanding, neglect, or overlooking of tl
effect of muscular contraction.

Paget, in the last edition of his admirable
thology, when speaking of ununited fractures
other cases the failure seems to occur earlier.
is formed, and the fragments remain quite c
the result of accidental hindrances of the nor
but it sometimes appears like a simple defec
defect which, I believe, can not be explain
more remarkable when we observe the many
later time be effected as if to diminish the evi
not this its true solution or explanation—viz.
to the task, has only been deprived by art of t
has specially provided for its accomplishment
of nature to be rendered available? By ado
frequently had occasion to describe—viz., the
directing nature by suitable, and not retardi
improper, forms of apparatus.

These views have been more than once
tacitly assented to by the profession generally
by some few of its members. The Internati
and embodied them in their report, and, I m
orable mention" to my apparatus. So soor
rectness and importance shall be fully realize
erally, must the treatment be conducted in ac
then will the doubt and discredit in which it
ly involved be succeeded by a certainty and u
which a fixed and unerring principle alone
Winchester, Esq., F.R.C.S., in *London L*

6. *Is Amaurosis Produced by Tobacco.*—
Sir: You have done me the honor to insert a
rosis in your journal. May I now ask space
servations on the same subject? I am indu
that I may notice a communication of M. Sich
Pratique de Paris at its *séance* of Feb. 23rd
reported in *L'Union Médicale* of May 5th.
Sichel and myself that I should state that my
to the *Lancet* in March last, and that consequ
opportunity of making myself acquainted
observations "De l'influence du Tabac F
d'Amaurose."

I now avail myself of the valuable opinio
mologist in confirmation of the views that I
on the relation between amaurosis and the in
true that he does not describe the pathologica
of the optic nerves, as I was induced to con
recorded; but more recent observation has sa
as a stage only of a progressing condition.

I was anxious to cite cases in which the abnormity was as positive and as evident as possible, and the attendant subjective symptoms correspondent. I had no doubt that I was enabled to pronounce certain conditions of the fundus of the eye to have been produced by the influence of tobacco, but as they were comprised in differences of vascularity and coloration of the optic nerve, I felt that I should have some difficulty in convincing the sceptical, unless I was enabled to adduce more persistent and reliable phenomena.

M. Sichel has no doubt of the sufficiency of the cause, nor of its frequency of operation, for he considers that no one can long smoke more than twenty grammes of tobacco per diem without impairment of sight, etc.

According to his observation, "Les symptomes ophthalmoscopiques sont negatives ou peu prononcees ; papilles optiques tantot tres blanches, surtout dans l'une de leurs moities—tantot un peu injectees, leurs contours mal circonscrits, quelquefois en partie effaces ; retine peu injectee ; vaisseaux centraux tantot normaux, tantot elargis ; les veines centrales surtout tres elargies quelquefois, quand l'affection est arrivee a son dernier degre."

Though I did not, for obvious reasons, detail the minutiæ of the ophthalmoscopic appearances in the cases of which I wrote the outlines, yet all these conditions were more or less present. As I was writing for the profession at large, my object was to state the condition of the eye to which the loss of vision was ascribable.

I was induced to use the term *amaurosis* as I knew of no other that conveys without circumlocution that form of blindness which has its origin in disorder of the percipient, rather than in any other structures of the eye. There may be a question as to the condition of atrophy in the early degrees of this affection ; hence some would hesitate to designate it atrophy. I have noticed a pallid state of the nerve in some cases ; that, perhaps, ought to be styled anæmia rather than atrophy ; but, as I have stated, I consider it a question of degree rather than of essence.

Though I do not feel justified in going so far as Sichel, and should not expect to find loss of function in all old abusers of tobacco any more than I should expect to find cirrhosis in old sots, or partial blindness in all those saturated with syphilitic poison ; yet I am convinced, from much observation, that the injurious effects of tobacco may be seen in the eye much more commonly than is usually believed. There is no doubt that some men may transgress the laws of health with apparent impunity ; but it would be very unsafe thence to argue that all may do the same. Again, we know that some physiological agents influence the vital conditions in various ways : in one man, the brain may be more susceptible of the injurious effects of alcohol than any other organ ; in another, the liver ; and in a third, the kidneys. And yet further, one portion of the nervous centres may be more affected than the other ; indeed, all the others may be quite free from any reaction.

As with alcohol, so with tobacco. Our patients give the most op-

posite accounts of their feelings, etc., from
logical and pathological.

In conclusion, I feel assured that if Mr.
tion to my deductions, will continue in a
amine cases, he will soon be convinced
cerned in the production of amaurosis,
nervous structures of the eye is ultima
WORDSWORTH, F.R.C.S.

7. *Death-Rate in Small Pox.*—Mr. Ma
the Small-pox and Vaccination Hospital a
vaccinated persons who are attacked, 36
attacked after vaccination the mortality is
And, further, that if after the operation th
the arm but one scar, the mortality is 7·
4·13 per cent.; if three, 1·85 per cent.;
mortality is reduced to 6·74 per cent.
the experience of such a man as Mr. Ma
ficient to silence, if not convince, the rabi
We would have been glad to learn from
experience of Mr. Marson, the influence
upon the occurrence and fatality of small
fluence of secondary vaccination? At wh
formed? Is it necessary immediately aft
nation of every seventh year? These are q
no doubt Mr. Marson will feel it his dut
Without anticipating his reply, we may
inconsiderable extent not a single case
after revaccination. There is no question
terested that has a more important beari
than this. There is none, probably, on
sity of opinion. The records of the Sma
ought to afford something like a satisfac
greatly conducive to a settlement of th
would state his experience upon this poin
tent by his long experience, and by the u
can give upon such a matter, to relieve th
a disputed question, than the highly respe
Small-Pox and Vaccination Hospital.—*L*

8. *Artificial Formation of Fibrin.*—In a
before the Royal Society, he showed that i
passed through albumen, derived from the
or gluten of wheat, portions of it become
however, a small quantity of potash be int
It has been thought that the discovery ma
phenomena of fibrinous diseases, as phth
the use of potash in their treatment.—*Lon*

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